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# WISCONSIN CANCER INCIDENCE AND MORTALITY

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1997

December 1999

Bureau of Health Information  
Division of Health Care Financing  
Wisconsin Department of Health and Family Services  
P.O. Box 309, Madison WI 53701-0309

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## Introduction

*Wisconsin Cancer Incidence and Mortality, 1997* presents summary information about Wisconsin cancer incidence (new cancer cases) and mortality (deaths due to cancer) in 1997. The Wisconsin Cancer Reporting System (WCRS), part of the Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services, collects reports of all newly diagnosed cancer cases from more than 300 Wisconsin hospitals, clinics and physician offices. In addition to those sources, 17 out-of-state cancer registries that have a data exchange agreement with WCRS provide reports of Wisconsin residents diagnosed with cancer in those states. This report would not be possible without the conscientious reporting of all sources mentioned.

Since 1976, WCRS has collected cancer incidence data on Wisconsin residents as mandated by Section 255.04, Wisconsin Statutes. All invasive and noninvasive malignant tumors, except basal and squamous cell carcinomas of the skin, are reportable to WCRS. Starting in 1994, WCRS entered into a cooperative agreement with the Centers for Disease Control and Prevention (CDC) and became part of the National Program of Cancer Registries (NPCR). This program is authorized by the Cancer Registries Amendment Act (Public Law 102-515).

Three changes from previous annual reports make *Wisconsin Cancer Incidence and Mortality, 1997* more comparable to national data and the cancer publications of other states (changes listed below).

- The report now focuses on invasive cancer incidence (previous reports focused on incidence that combined all cancers, invasive and non-invasive); see Tables 1A, 2A, 3 - 8 and Figures 1 - 3.
- A table with national cancer incidence and mortality rates was added (Supplemental Table D).
- Treatment tables were omitted. (Treatment information is available upon request).

*Wisconsin Cancer Incidence and Mortality, 1997* was produced by the Department of Health and Family Services. Cancer Reporting System staff collected, edited and compiled the data used in this report. Mary Foote and Laura Stephenson-Vine prepared the text. Laura Stephenson-Vine produced the tables and graphs. The report was reviewed and edited by Patricia Nametz, Indiana Strombom, and other Department staff. This report was prepared under the supervision of Patricia Guhleman, Population Health Analysis Unit Chief. Overall direction for this report was provided by Barbara Rudolph, Director, and Sandra Breitborde, Deputy Director, Bureau of Health Information.

This publication, as well as other information about WCRS operations and other annual and special reports is available at the Department Internet World Wide Web site address (listed below).

Requests for additional cancer incidence data may be addressed to:

Cancer Reporting System, Bureau of Health Information  
Division of Health Care Financing  
Wisconsin Department of Health and Family Services  
P.O. Box 309  
Madison, WI 53702-0309  
(608) 266-8926  
<http://www.dhfs.state.wi.us/wcrs/>



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## Guide for Reading this Report

**Content of the Report.** *Wisconsin Cancer Incidence and Mortality, 1997* summarizes data on cases among Wisconsin residents diagnosed with cancer between January 1, 1997 and December 31, 1997 and reported to WCRS by June 15, 1999. The majority, approximately 95 percent, of WCRS' estimated 1997 cases are included in this report (some cases do not get reported until after publication). Mortality data are derived from 1997 Wisconsin resident deaths where the underlying cause of death was listed as cancer.

Incidence and mortality data are analyzed by demographic characteristics of sex, age and race. Race is presented in three categories: White, African American, and Other (includes American Indian and Asian/Pacific Islander).

The geographic variables in this report (county and zip code) are based on the patient's residence at time of diagnosis for incidence data, and the residence at time of death for mortality data.

All cancers in this report are classified and listed in order of their site group classification found in the *International Classification of Diseases for Oncology (ICD-O), Second Edition*.

**Data Sources.** This report includes all cancer cases diagnosed in 1997 among Wisconsin residents. These cases were reported by Wisconsin hospitals, clinics and physician offices, cooperating out-of-state cancer registries and selected Minnesota hospitals.

The 1997 mortality data were obtained from death certificates for Wisconsin residents, collected and coded by the Vital Records and Statistics Section, Bureau of Health Information. Cancer mortality rate calculations are based on the underlying cause of death recorded on the death certificate.

The Bureau of Health Information (BHI) prepares the Wisconsin population estimates. To produce these estimates, BHI uses beginning-year state and county population totals developed by the Wisconsin Department of Administration, Demographic Services, together with the mid-year age- and sex-specific state estimates from the Population Estimates Branch of the U.S. Bureau of the Census.

**Invasive and In Situ Cases.** Beginning this year, this annual report focuses on invasive cancer data in response to an increasing interest in comparing Wisconsin data with national data. Most of the incidence tables contain invasive-only cancers. However, some tables still include both invasive and *in situ* (non-invasive) cancers. The specific incidence description, *invasive* or *in situ/invasive combined*, is included in every table title to clearly identify table contents.

Invasive cancer incidence rates are presented for general comparability to national data and other states' annual cancer data. Invasive cancer rates exclude all *in situ* cancer cases except for those

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of the urinary bladder (following national standards). *In situ/invasive combined* incidence rates are provided to allow comparisons with data in previous annual reports.

***Age-Adjusted Incidence and Mortality Rates.*** Following National Cancer Institute (NCI) and CDC guidelines, WCRS has age-adjusted the incidence and mortality rates per 100,000 population for Wisconsin residents to the U.S. 1970 standard population in all the tables in this report (where rates are presented). Rates are age-adjusted in order to account for differences in age distributions over time and across different geographic regions. More detail on the age-adjustment method is provided in the Technical Notes (page 51).

Cancer incidence rates reflect the number of newly diagnosed cancers in the population; this is not the same as the number of individuals who have been newly diagnosed with cancer. For example, in this report, a person diagnosed with two cancers in the same year will add two cancers to the annual cancer incidence rate. The distinction between "cancer cases" and "individuals with cancer" is important for interpretation of cancer rates.

***Data Limitations.*** This report represents data collected from different types of facilities. The capability of reporting sources to provide timely and complete data varies, and WCRS appreciates the effort and dedication that reporting facilities make to ensure the overall good quality of Wisconsin cancer reports. However, variations in facility compliance and reporting practices do occur based on the experience and qualifications of the reporters and the resources of the facility.

WCRS staff edit, process and analyze the data received. Quality assurance measures are in place to identify incomplete and/or inaccurate incoming data. Facility-specific and group training sessions (in person, phone, or written correspondence) are implemented as needed (WCRS-initiated) or requested (facility-initiated).

The one-year time frame of this report limits certain data analyses because small numbers are reported for less common cancer sites and for county-level data. Frequency counts by cancer site are presented as an estimate of general magnitude for each county. Caution is warranted when computing rates (rates or relative proportions may be unreliable due to the small population of many counties and relative rarity of some types of cancer), and comparing small numbers across counties or between different cancer sites and racial groups.

Presentation of Wisconsin and national data in Supplemental Table D is provided in response to general interest. These national rates are developed by the National Cancer Institute (NCI), SEER (Surveillance, Epidemiology and End Results) program. They are based on data collected from eleven population-based cancer registries in various states and metropolitan regions, chosen by NCI to represent the country's age, sex and race proportions, as a whole. The 1996 data included in Table D are the latest SEER data available.

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All Wisconsin-based facilities are required by Wisconsin statute to abstract and report cancer incidence data to WCRS within six months from the date of diagnosis or date of first contact with the patient. This ‘six-month rule’ is the national standard that all central cancer registries work to achieve and maintain. Starting in 1998, WCRS conducted a Centers for Disease Control-sponsored project to improve the timeliness of reporting Wisconsin-resident cancer cases to WCRS. This enhanced-timeliness project collected just over 3,000 cases, diagnosed between 1994 and 1997, which were not previously reported to WCRS. Under current collection methods, the 1997 reports captured through this timeliness project would not have been reported soon enough to be included in this report. However, because of this project, those 1997 cases *are* included in this publication. This improvement in timeliness may positively affect (increase) the incidence rates for both the invasive-only and *in situ/invasive combined* tables.

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## Key Findings

### *Demographic characteristics of invasive cancer incidence*

- There were 23,857 newly diagnosed invasive cancer cases in 1997 among Wisconsin residents, compared with 22,988 in 1996. This increase may be partly due to improved timeliness in data collection for 1997 cases.
- The overall age-adjusted invasive cancer incidence rate for Wisconsin residents in 1997 was 385 per 100,000 population. For males, the 1997 rate was 453 per 100,000 male population; for females, it was 337 per 100,000 female population.
- In 1997, the most frequently diagnosed invasive cancers among Wisconsin women were breast (32%), lung (12%), and colon (11%). Among Wisconsin men, the most frequently diagnosed cancers were prostate (31%), lung (16%) and colon (9%).
- The age-adjusted invasive breast cancer incidence rate among Wisconsin women in 1997 was 110 per 100,000 female population, similar to the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) rate in 1996 (the latest year for which data are available) of 111 per 100,000. The invasive lung cancer incidence rate among Wisconsin women in 1997 was 40 per 100,000; the 1996 SEER rate among women was 42 per 100,000.
- The invasive prostate cancer incidence rate among Wisconsin men in 1997 was 141 per 100,000, slightly higher than the 1996 SEER rate of 136 per 100,000. The invasive lung cancer incidence among Wisconsin men in 1997 was 71 per 100,000, similar to the 1996 SEER rate among men of 70 per 100,000.
- In 1997, people age 65 or older accounted for 61 percent of newly diagnosed cancer cases and 74 percent of cancer deaths.

### *Tumor characteristics*

- In 1997, 53 percent of cancers were diagnosed "early" (cases diagnosed at *in situ* or localized stage of disease, combined). This was slightly higher than in 1996 (50%).
- In 1997, 84 percent of cervical cancers, 83 percent of bladder cancers, 78 percent of prostate cancers and 71 percent of breast cancers were detected early. By contrast, only 24 percent of lung cancers, 28 percent of lymphomas, and 15 percent of pancreatic cancers were detected early.

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### ***Cancer mortality***

- There were 10,532 cancer deaths in Wisconsin in 1997.
- The overall age-adjusted cancer mortality rate for Wisconsin residents in 1997 was 157 per 100,000 population, lower than the 1996 SEER rate of 167. For Wisconsin males, it was 191 per 100,000 population; for Wisconsin females, it was 133 per 100,000 population. SEER rates for 1996 were higher among both males, with a rate of 207 per 100,000 population, and females, with a rate of 139 per 100,000.
- The cancer mortality rate was higher in the Southeastern region of the state (165 per 100,000) than in the state as a whole (157 per 100,000). Among Wisconsin's three most populous counties, the cancer mortality rate was highest in Milwaukee County (177 per 100,000) followed by Waukesha County (159 per 100,000) and Dane County (143 per 100,000).
- Lung cancer continues to be the leading cause of cancer mortality for both women and men in Wisconsin (as well as nationally) and was responsible for 2,683 cancer deaths of Wisconsin residents in 1997. Twenty-nine percent of male cancer deaths and 22 percent of female cancer deaths in Wisconsin were due to lung cancer.
- The three highest rates of cancer death among Wisconsin women were lung (32 per 100,000), breast (21 per 100,000), and colon (12 per 100,000). Among Wisconsin men, the highest rates of cancer death were lung (56 per 100,000), prostate (22 per 100,000) and colon (16 per 100,000).
- For 1997 cancer deaths, 57 months was the average length of time between diagnosis and death for cancers that were diagnosed early, with *in situ* or localized stage of disease. This compares with 36 months for cancers diagnosed at a regional stage of disease, and 17 months for cancers diagnosed at a distant stage of disease. (See Technical Notes on page 49 for stage of disease definitions.)



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## Demographics of Cancer Incidence

**Table 1A. Number and Percent of Invasive Cancer Cases by Individual Primary Site and Sex, Wisconsin, 1997**

PRIMARY SITE (organ of origin)	MALE		FEMALE		TOTAL	
	Number	%	Number	%	Number	%
Lip	50	0.4	13	0.1	63	0.3
Tongue	88	0.7	45	0.4	133	0.6
Major Salivary Glands	42	0.3	41	0.4	83	0.3
Gum	12	0.1	9	0.1	21	0.1
Floor of Mouth	30	0.2	23	0.2	53	0.2
Other & Unspecified Parts of Mouth	46	0.4	31	0.3	77	0.3
Oropharynx	68	0.5	20	0.2	88	0.4
Nasopharynx	21	0.2	11	0.1	32	0.1
Hypopharynx	41	0.3	7	0.1	48	0.2
Other Sites in Lip, Oral Cavity & Pharynx	15	0.1	7	0.1	22	0.1
Esophagus	224	1.8	60	0.5	284	1.2
Stomach	255	2.0	158	1.4	413	1.7
Small Intestine	59	0.5	43	0.4	102	0.4
Colon	1,084	8.7	1,219	10.7	2,303	9.7
Rectum, Rectosigmoid Junction & Anus	465	3.7	372	3.3	837	3.5
Liver & Intrahepatic Bile Duct	127	1.0	85	0.7	212	0.9
Gallbladder & Extrahepatic Bile Duct	71	0.6	80	0.7	151	0.6
Pancreas	228	1.8	242	2.1	470	2.0
Retroperitoneum & Peritoneum	20	0.2	28	0.2	48	0.2
Other Within Digestive Organs & Peritoneum	7	0.1	3	0.0	10	0.0
Nasal Cavities & Sinuses, Internal Ear	26	0.2	18	0.2	44	0.2
Larynx	219	1.8	40	0.4	259	1.1
Trachea, Bronchus & Lung	1,934	15.5	1,311	11.5	3,245	13.6
Pleura	44	0.4	14	0.1	58	0.2
Thymus, Heart & Mediastinum	25	0.2	10	0.1	35	0.1
Other Respiratory & Intrathoracic Sites	0	0.0	0	0.0	0	0.0
Hematopoietic & Reticuloendothelial Systems, Except Leukemia	145	1.2	130	1.1	275	1.2
Bone, Joints & Articular Cartilage	37	0.3	28	0.2	65	0.3
Connective, Subcutaneous & Other Soft Tissue	75	0.6	63	0.6	138	0.6
Melanoma of Skin	281	2.3	249	2.2	530	2.2
Breast	31	0.2	3,602	31.6	3,633	15.2
Uterus, NOS	-	-	28	0.2	28	0.1
Cervix Uteri	-	-	237	2.1	237	1.0
Placenta	-	-	0	0.0	0	0.0
Corpus Uteri	-	-	693	6.1	693	2.9
Ovary, Fallopian Tube & Broad Ligament	-	-	491	4.3	491	2.1
Other & Unspecified Female Genital Organs	-	-	87	0.8	87	0.4
Prostate	3,814	30.6	-	-	3,814	16.0
Testis	185	1.5	-	-	185	0.8
Penis & Other Male Genital Organs	20	0.2	-	-	20	0.1
Urinary Bladder	898	7.2	332	2.9	1,230	5.2
Kidney & Other Urinary Organs	364	2.9	212	1.9	576	2.4
Eye & Lacrimal Gland	30	0.2	33	0.3	63	0.3
Brain	219	1.8	190	1.7	409	1.7
Other & Unspecified Parts of Nervous System	13	0.1	6	0.1	19	0.1
Thyroid Gland	81	0.6	215	1.9	296	1.2
Other Endocrine Glands	8	0.1	18	0.2	26	0.1
Lymph Nodes	338	2.7	286	2.5	624	2.6
Hodgkin's Disease	81	0.6	88	0.8	169	0.7
Lymphoid Leukemia	170	1.4	108	0.9	278	1.2
Myeloid Leukemia	139	1.1	95	0.8	234	1.0
Other Leukemia	49	0.4	34	0.3	83	0.3
Other & Ill-defined Sites	61	0.5	39	0.3	100	0.4
Unknown Primary Site	223	1.8	240	2.1	463	1.9
All Reportable Sites	12,463	100.0	11,394	100.0	23,857	100.0

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

- The four most common cancers (lung, colon, breast and prostate) comprised over half of all newly reported cases.

## Demographics of Cancer Incidence

**Table 1B. Number and Percent of *In Situ/Invasive Combined* Cancer Cases by Individual Primary Site and Sex, Wisconsin, 1997**

PRIMARY SITE (organ of origin)	MALE		FEMALE		TOTAL	
	Number	%	Number	%	Number	%
Lip	52	0.4	13	0.1	65	0.3
Tongue	90	0.7	45	0.3	135	0.5
Major Salivary Glands	42	0.3	41	0.3	83	0.3
Gum	12	0.1	9	0.1	21	0.1
Floor of Mouth	31	0.2	24	0.2	55	0.2
Other & Unspecified Parts of Mouth	48	0.4	34	0.3	82	0.3
Oropharynx	69	0.5	22	0.2	91	0.4
Nasopharynx	21	0.2	11	0.1	32	0.1
Hypopharynx	41	0.3	7	0.1	48	0.2
Other Sites in Lip, Oral Cavity & Pharynx	15	0.1	7	0.1	22	0.1
Esophagus	229	1.8	61	0.5	290	1.1
Stomach	262	2.1	162	1.3	424	1.7
Small Intestine	59	0.5	44	0.3	103	0.4
Colon	1,166	9.1	1,282	10.0	2,448	9.6
Rectum, Rectosigmoid Junction & Anus	496	3.9	399	3.1	895	3.5
Liver & Intrahepatic Bile Duct	127	1.0	85	0.7	212	0.8
Gallbladder & Extrahepatic Bile Duct	71	0.6	84	0.7	155	0.6
Pancreas	228	1.8	242	1.9	470	1.8
Retroperitoneum & Peritoneum	20	0.2	28	0.2	48	0.2
Other Within Digestive Organs & Peritoneum	7	0.1	3	0.0	10	0.0
Nasal Cavities & Sinuses, Internal Ear	26	0.2	18	0.1	44	0.2
Larynx	229	1.8	43	0.3	272	1.1
Trachea, Bronchus & Lung	1,939	15.2	1,313	10.2	3,252	12.7
Pleura	44	0.3	14	0.1	58	0.2
Thymus, Heart & Mediastinum	25	0.2	10	0.1	35	0.1
Other Respiratory & Intrathoracic Sites	0	0.0	0	0.0	0	0.0
Hematopoietic & Reticuloendothelial Systems, Except Leukemia	145	1.1	130	1.0	275	1.1
Bone, Joints & Articular Cartilage	37	0.3	28	0.2	65	0.3
Connective, Subcutaneous & Other Soft Tissue	75	0.6	63	0.5	138	0.5
Melanoma of Skin	384	3.0	337	2.6	721	2.8
Breast	33	0.3	4,307	33.5	4,340	16.9
Uterus, NOS	-	-	28	0.2	28	0.1
Cervix Uteri	-	-	702	5.5	702	2.7
Placenta	-	-	0	0.0	0	0.0
Corpus Uteri	-	-	714	5.6	714	2.8
Ovary, Fallopian Tube & Broad Ligament	-	-	491	3.8	491	1.9
Other & Unspecified Female Genital Organs	-	-	152	1.2	152	0.6
Prostate	3,827	30.0	-	-	3,827	14.9
Testis	185	1.5	-	-	185	0.7
Penis & Other Male Genital Organs	24	0.2	-	-	24	0.1
Urinary Bladder	898	7.0	332	2.6	1,230	4.8
Kidney & Other Urinary Organs	373	2.9	220	1.7	593	2.3
Eye & Lacrimal Gland	34	0.3	33	0.3	67	0.3
Brain	219	1.7	190	1.5	409	1.6
Other & Unspecified Parts of Nervous System	13	0.1	6	0.0	19	0.1
Thyroid Gland	81	0.6	216	1.7	297	1.2
Other Endocrine Glands	8	0.1	18	0.1	26	0.1
Lymph Nodes	338	2.7	286	2.2	624	2.4
Hodgkin's Disease	81	0.6	88	0.7	169	0.7
Lymphoid Leukemia	170	1.3	108	0.8	278	1.1
Myeloid Leukemia	139	1.1	95	0.7	234	0.9
Other Leukemia	49	0.4	34	0.3	83	0.3
Other & Ill-defined Sites	63	0.5	39	0.3	102	0.4
Unknown Primary Site	223	1.7	240	1.9	463	1.8
All Reportable Sites	12,748	100.0	12,858	100.0	25,606	100.0

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

## Demographics of Cancer Incidence

**Table 2A. Number and Age-Adjusted Rate of *Invasive* Cancer Cases by Site Group and Sex, Wisconsin, 1997**

PRIMARY SITE	MALE		FEMALE		TOTAL	
	Number	Rate	Number	Rate	Number	Rate
Mouth & Pharynx	413	15.2	207	5.9	620	10.2
Stomach	255	9.1	158	4.0	413	6.3
Colon	1,084	38.5	1,219	31.7	2,303	34.6
Rectum & Rectosigmoid Junction	465	17.0	372	10.3	837	13.4
Pancreas	228	8.3	242	6.6	470	7.4
Other Gastrointestinal Tract	508	18.5	299	8.5	807	13.0
Trachea, Bronchus & Lung	1,934	70.6	1,311	39.6	3,245	53.1
Other Respiratory	314	11.5	82	2.6	396	6.6
Bone & Connective Tissue	112	4.1	91	2.9	203	3.5
Melanoma of Skin	281	9.9	249	7.8	530	8.7
Breast	31	1.1	3,602	110.1	3,633	59.1
Cervix Uteri	-	-	237	7.3	237	3.8
Corpus Uteri	-	-	693	22.1	693	11.7
Other Female Genital	-	-	606	18.6	606	9.9
Prostate	3,814	141.3	-	-	3,814	63.6
Other Male Genital	205	6.8	-	-	205	3.4
Urinary Bladder	898	31.8	332	8.7	1,230	18.8
Kidney & Other Urinary	364	13.2	212	6.3	576	9.4
Eye, Brain & Other Nervous System	262	9.6	229	7.4	491	8.4
Lymph Nodes	419	15.2	374	10.7	793	12.8
Leukemia	358	12.8	237	7.1	595	9.5
All Others	518	18.3	642	18.6	1,160	18.3
All Reportable Sites	12,463	452.7	11,394	336.8	23,857	385.3

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Notes: Male rates are per 100,000 male residents, female rates are per 100,000 female residents and total rates are per 100,000 residents. All rates are age-adjusted to the 1970 United States population. Site groups are listed in ICD-O2 numerical code order. See Technical Notes at the end of this report for the individual sites included in each site group.

- For the non-sex-specific cancers, cancer rates were higher for men than women for all site groups except breast and 'all others'. For males the annual cancer incidence rate was 453 per 100,000 population and for females the annual cancer incidence rate was 337 per 100,000 population.

**Table 2B. Number and Age-Adjusted Rate of *In Situ/Invasive Combined* Cancer Cases by Site Group and Sex, Wisconsin, 1997**

PRIMARY SITE	MALE		FEMALE		TOTAL	
	Number	Rate	Number	Rate	Number	Rate
Mouth & Pharynx	421	15.5	213	6.1	634	10.5
Stomach	262	9.3	162	4.1	424	6.4
Colon	1,166	41.4	1,282	33.5	2,448	36.9
Rectum & Rectosigmoid Junction	496	18.1	399	11.1	895	14.3
Pancreas	228	8.3	242	6.6	470	7.4
Other Gastrointestinal Tract	513	18.7	305	8.6	818	13.1
Trachea, Bronchus & Lung	1,939	70.8	1,313	39.7	3,252	53.3
Other Respiratory	324	11.9	85	2.7	409	6.8
Bone & Connective Tissue	112	4.1	91	2.9	203	3.5
Melanoma of Skin	384	13.5	337	10.5	721	11.8
Breast	33	1.2	4,307	132.7	4,340	71.0
Cervix Uteri	-	-	702	23.2	702	11.7
Corpus Uteri	-	-	714	22.8	714	12.1
Other Female Genital	-	-	671	20.6	671	10.9
Prostate	3,827	141.7	-	-	3,827	63.8
Other Male Genital	209	6.9	-	-	209	3.4
Urinary Bladder	898	31.8	332	8.7	1,230	18.8
Kidney & Other Urinary	373	13.5	220	6.5	593	9.6
Eye, Brain & Other Nervous System	266	9.7	229	7.4	495	8.5
Lymph Nodes	419	15.2	374	10.7	793	12.8
Leukemia	358	12.8	237	7.1	595	9.5
All Others	520	18.3	643	18.6	1,163	18.3
All Reportable Sites	12,748	462.9	12,858	384.0	25,606	414.4

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Notes: Male rates are per 100,000 male residents, female rates are per 100,000 female residents and total rates are per 100,000 residents. All rates are age-adjusted to the 1970 United States population. Site groups are listed in ICD-O2 numerical code order. See Technical Notes at the end of this report for the individual sites included in each site group.

## Demographics of Cancer Incidence

**Table 3. Number and Percent of *Invasive* Cancer Cases by Site Group and Race : Males, Wisconsin, 1997**

PRIMARY SITE	White		African American		Other		Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Mouth & Pharynx	378	3.2	22	4.7	9	7.1	4	4.7	413	3.3
Stomach	236	2.0	11	2.4	7	5.6	1	1.2	255	2.0
Colon	1,037	8.8	30	6.4	12	9.5	5	5.9	1,084	8.7
Rectum & Rectosigmoid Junction	449	3.8	9	1.9	5	4.0	2	2.4	465	3.7
Pancreas	218	1.8	9	1.9	1	0.8	0	0.0	228	1.8
Other Gastrointestinal Tract	480	4.1	18	3.9	9	7.1	1	1.2	508	4.1
Trachea, Bronchus & Lung	1,816	15.4	94	20.1	19	15.1	5	5.9	1,934	15.5
Other Respiratory	296	2.5	12	2.6	4	3.2	2	2.4	314	2.5
Bone & Connective Tissue	106	0.9	3	0.6	3	2.4	0	0.0	112	0.9
Melanoma of Skin	275	2.3	1	0.2	2	1.6	3	3.5	281	2.3
Breast	29	0.2	1	0.2	1	0.8	0	0.0	31	0.2
Prostate	3,575	30.3	170	36.4	26	20.6	43	50.6	3,814	30.6
Other Male Genital	199	1.7	3	0.6	3	2.4	0	0.0	205	1.7
Urinary Bladder	876	7.4	8	1.7	5	4.0	9	10.6	898	7.2
Kidney & Other Urinary	351	3.0	10	2.1	3	2.4	0	0.0	364	2.9
Eye, Brain & Other Nervous System	250	2.1	7	1.5	4	3.2	1	1.2	262	2.1
Lymph Nodes	391	3.3	19	4.1	5	4.0	4	4.7	419	3.4
Leukemia	333	2.8	16	3.4	5	4.0	4	4.7	358	2.9
All Others	490	4.2	24	5.1	3	2.4	1	1.2	518	4.2
All Reportable Sites	11,785	100.0	467	100.0	126	100.0	85	100.0	12,463	100.0

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Notes: Percents are calculated from the total number of cases for the particular sex and race group. Small numbers of cases for minority race/ethnicity groups preclude reliable group comparisons. Site groups are listed in ICD-O2 numerical code order. See Technical Notes at the end of this report for the individual sites included in each site group.

- The most frequently reported cancers among Wisconsin males in each race group were prostate, lung and colon (31 percent, 15 percent, and 9 percent, respectively, all races combined).

**Table 4. Number and Percent of *Invasive* Cancer Cases by Site Group and Race: Females, Wisconsin, 1997**

PRIMARY SITE	White		African American		Other		Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Mouth & Pharynx	198	1.8	5	1.3	2	1.5	2	3.2	207	1.8
Stomach	142	1.3	12	3.2	4	3.1	0	0.0	158	1.4
Colon	1,139	10.5	50	13.4	19	14.6	11	17.5	1,219	10.7
Rectum & Rectosigmoid Junction	358	3.3	10	2.7	3	2.3	1	1.6	372	3.3
Pancreas	223	2.1	15	4.0	4	3.1	0	0.0	242	2.1
Other Gastrointestinal Tract	276	2.5	13	3.5	6	4.6	4	6.3	299	2.6
Trachea, Bronchus & Lung	1,239	11.4	54	14.4	14	10.8	4	6.3	1,311	11.5
Other Respiratory	77	0.7	4	1.1	1	0.8	0	0.0	82	0.7
Bone & Connective Tissue	84	0.8	4	1.1	1	0.8	2	3.2	91	0.8
Melanoma of Skin	241	2.2	0	0.0	2	1.5	6	9.5	249	2.2
Breast	3,460	32.0	105	28.1	25	19.2	12	19.0	3,602	31.6
Cervix Uteri	204	1.9	19	5.1	13	10.0	1	1.6	237	2.1
Corpus Uteri	671	6.2	14	3.7	5	3.8	3	4.8	693	6.1
Other Female Genital	585	5.4	12	3.2	5	3.8	4	6.3	606	5.3
Urinary Bladder	321	3.0	6	1.6	1	0.8	4	6.3	332	2.9
Kidney & Other Urinary	204	1.9	3	0.8	4	3.1	1	1.6	212	1.9
Eye, Brain & Other Nervous System	219	2.0	5	1.3	5	3.8	0	0.0	229	2.0
Lymph Nodes	365	3.4	7	1.9	2	1.5	0	0.0	374	3.3
Leukemia	220	2.0	10	2.7	4	3.1	3	4.8	237	2.1
All Others	601	5.6	26	7.0	10	7.7	5	7.9	642	5.6
All Reportable Sites	10,827	100.0	374	100.0	130	100.0	63	100.0	11,394	100.0

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Notes: Percents are calculated from the total number of cases for the particular sex and race group. Small numbers of cases reported for minority race/ethnicity groups preclude reliable group comparisons. Site groups are listed in ICD-O2 numerical code order. See Technical Notes at the end of this report for the individual sites included in each site group.

- The most frequently reported cancer among Wisconsin females, all races combined, was breast (32%). Lung cancer was the second most frequently reported cancer for both white and African American females (11% and 14%, respectively), and colon cancer was the third most frequently reported.



## Demographics of Cancer Incidence

**Table 5. Number and Age-Adjusted Rate of *Invasive* Cancer Cases by Major Site Group and Region, Wisconsin, 1997**

PRIMARY SITE		REGION					TOTAL
		SOUTH	SOUTHEAST	NORTHEAST	WEST	NORTH	
Colorectal	NUMBER	525	1,165	720	436	294	3,140
	RATE	47.0	48.6	50.2	47.0	44.4	48.0
Other Gastrointestinal Tract	NUMBER	368	865	543	289	245	2,310
	RATE	33.8	38.4	39.0	31.3	39.1	36.9
Respiratory	NUMBER	586	1,444	808	449	354	3,641
	RATE	56.7	65.5	58.6	52.0	56.8	59.7
Breast	NUMBER	586	1,404	866	449	328	3,633
	RATE	55.2	61.6	63.5	53.0	56.4	59.1
Female Genital	NUMBER	284	545	372	199	136	1,536
	RATE	26.6	24.4	27.9	23.8	23.5	25.4
Male Genital	NUMBER	598	1,582	915	503	421	4,019
	RATE	58.2	73.4	67.9	58.6	67.6	66.9
Urinary Tract	NUMBER	281	610	472	234	209	1,806
	RATE	25.8	26.9	32.4	25.2	31.6	28.2
Leukemia & Lymph Nodes	NUMBER	216	526	325	168	153	1,388
	RATE	20.1	23.3	23.8	19.3	24.4	22.4
All Others	NUMBER	437	906	505	306	230	2,384
	RATE	41.3	40.2	37.1	35.4	39.0	38.8
All Reportable Sites	NUMBER	3,881	9,047	5,526	3,033	2,370	23,857
	RATE	364.6	402.2	400.5	345.5	382.7	385.3

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Notes: Rates are per 100,000 residents, age-adjusted to the 1970 United States population. The regions used are the Department of Health and Family Services Regions. See Map on page 61 for regional boundaries. See Technical Notes at the end of this report for the individual sites included in each major site group. In this table, the major site group "Other Gastrointestinal Tract" includes the site group "Mouth and Pharynx."

- The Southeastern and Northeastern regions had higher total incidence for reported cancers (402 and 400 respectively, per 100,000) than did Wisconsin as a whole (385 per 100,000).

## Demographics of Cancer Incidence

**Table 6. Number and Age-Adjusted Rate of *Invasive* Cancer Cases by Major Site Group, Counties Over 100,000 Population, Wisconsin, 1997**

Primary Site		Brown	Dane	Kenosha	La Crosse	Marathon	Milwaukee	Outagamie
Colorectal	Number	106	182	83	61	69	587	100
	Rate	45.0	45.5	48.8	50.8	44.3	49.4	59.9
Other Gastro- Intestinal Tract	Number	72	113	35	35	50	464	81
	Rate	31.7	30.0	23.5	28.4	33.8	43.0	50.0
Respiratory	Number	123	198	86	77	69	782	108
	Rate	55.4	53.6	55.8	69.8	47.0	74.0	67.5
Breast	Number	154	259	77	74	69	676	115
	Rate	64.9	66.0	44.8	62.5	48.7	61.6	70.2
Female Genital	Number	73	120	41	28	31	271	46
	Rate	32.9	29.0	25.9	25.2	20.3	25.1	29.9
Male Genital	Number	171	227	85	67	94	754	112
	Rate	79.2	63.4	55.7	60.2	68.2	72.3	74.3
Urinary Tract	Number	90	115	45	24	45	305	76
	Rate	37.8	30.1	26.5	20.1	31.3	27.6	43.0
Leukemia & Lymph Nodes	Number	48	101	32	24	39	263	42
	Rate	20.1	25.2	19.6	20.8	26.7	24.0	25.2
All Others	Number	89	175	40	42	43	435	67
	Rate	36.7	43.4	24.5	35.2	31.0	40.4	39.5
All Reportable Sites		926	1490	524	432	509	4537	747
		403.8	386.3	325.1	372.9	351.4	417.3	459.7

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Notes: Rates are per 100,000 residents, age-adjusted to the 1970 United States population. See Technical Notes at the end of this report for the individual sites included in each major site group. In this table, the major site group "Other Gastrointestinal Tract" includes the site group "Mouth and Pharynx."

(table continued on next page)

**Table 6. Number and Age- Adjusted Rate of *Invasive* Cancer Cases by Major Site Group, Counties Over 100,000 Population, Wisconsin, 1997 (continued)**

Primary Site		Racine	Rock	Sheboygan	Waukesha	Washington	Winnebago	State Total
Colorectal	Number	91	94	80	191	61	98	3,140
	Rate	38.9	49.7	49.7	49.2	50.7	51.2	48.0
Other Gastro- Intestinal Tract	Number	100	57	60	123	42	74	2,310
	Rate	44.9	30.7	36.2	32.4	34.9	42.4	36.9
Respiratory	Number	162	137	67	203	48	116	3,641
	Rate	74.5	79.7	46.4	55.0	39.4	63.8	59.7
Breast	Number	127	100	95	281	81	113	3,633
	Rate	58.5	53.3	70.1	71.6	62.1	62.7	59.1
Female Genital	Number	57	42	39	82	24	50	1,536
	Rate	27.1	23.4	27.7	21.7	20.7	26.2	25.4
Male Genital	Number	182	99	90	333	72	101	4,019
	Rate	86.8	57.1	63.1	92.9	64.1	56.4	66.9
Urinary Tract	Number	54	37	49	110	22	50	1,806
	Rate	25.2	19.7	32.8	29.5	17.9	27.2	28.2
Leukemia & Lymph Nodes	Number	48	36	41	86	29	40	1,388
	Rate	24.5	20.1	29.2	22.5	21.2	21.5	22.4
All Others	Number	90	83	58	168	44	77	2,384
	Rate	43.7	47.3	42.9	43.2	33.8	42.0	38.8
All Reportable Sites	Number	911	685	579	1577	423	719	23,857
	Rate	424.1	381.0	398.2	417.9	345.0	393.2	385.3

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Notes: Rates are per 100,000 residents, age-adjusted to the 1970 United States population. See Technical Notes at the end of this report for the individual sites included in each major site group. In this table, the major site group "Other Gastrointestinal Tract" includes the site group "Mouth and Pharynx."

- In 1997, the 13 most populous counties in Wisconsin had age-adjusted cancer incidence rates that ranged from 325 per 100,000 to 460 per 100,000, in relation to the statewide rate of 385 per 100,000.

## Demographics of Cancer Incidence

**Table 7. Number of *Invasive* Cancer Cases by Site Group, Age and Sex, Wisconsin, 1997**

PRIMARY SITE	AGE AND SEX														
	Total	Males	Females	0-19		20-24		25-29		30-34		35-39		40-44	
				M	F	M	F	M	F	M	F	M	F	M	F
Mouth & Pharynx	620	413	207	2	2	1	2	3	3	5	2	10	2	12	7
Stomach	413	255	158	0	0	0	0	1	3	1	0	3	3	6	3
Colon	2,303	1,084	1,219	1	0	0	3	1	0	7	5	11	9	14	18
Rectum & Rectosigmoid Junction	837	465	372	0	0	0	0	1	1	3	1	5	4	6	10
Pancreas	470	228	242	0	0	0	0	0	1	1	1	0	2	4	5
Other Gastrointestinal Tract	807	508	299	5	2	0	0	2	0	1	2	4	3	7	6
Trachea, Bronchus & Lung	3,245	1,934	1,311	2	1	0	0	0	0	2	3	10	8	35	25
Other Respiratory	396	314	82	1	1	1	0	3	0	4	0	3	5	3	3
Bone & Connective Tissue	203	112	91	9	14	5	2	1	1	4	1	5	4	5	6
Melanoma of Skin	530	281	249	1	2	1	9	3	14	13	18	20	22	20	26
Breast	3,633	31	3,602	0	0	0	11	0	12	1	53	0	120	0	222
Cervix Uteri	237	0	237	0	0	0	6	0	13	0	39	0	33	0	27
Corpus Uteri	693	0	693	0	0	0	0	0	2	0	3	0	11	0	22
Other Female Genital	606	0	606	0	4	0	8	0	9	0	15	0	16	0	37
Prostate	3,814	3,814	0	2	0	1	0	1	0	0	0	0	0	12	0
Other Male Genital	205	205	0	3	0	18	0	27	0	41	0	27	0	34	0
Urinary Bladder	1,230	898	332	0	1	0	0	0	1	0	2	5	6	11	3
Kidney & Other Urinary	576	364	212	1	3	1	1	0	1	4	0	7	2	11	9
Eye, Brain & Other Nervous System	491	262	229	26	24	7	5	7	6	8	7	15	17	22	9
Lymph Nodes	793	419	374	17	14	12	8	9	10	15	17	18	18	23	12
Leukemia	595	358	237	30	26	1	3	1	1	7	3	8	9	14	6
All Others	1,160	518	642	8	16	8	12	9	25	17	28	17	35	28	33
All Reportable Sites	23,857	12,463	11,394	108	110	56	70	69	103	134	200	171	329	267	489

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Note: Age groupings vary in this table; childhood cancers (0-19) are followed by 5-year groupings. See Technical Notes at the end of this report for the individual sites included in each site group.

(Table continued on next page)

**Table 7. Number of Cancer Cases by Site Group, Age and Sex, Wisconsin, 1997 (Continued)**

	AGE AND SEX																	
	45-49		50-54		55-59		60-64		65-69		70-74		75-79		80-84		85+	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Mouth & Pharynx	30	13	31	14	45	9	60	17	67	30	57	24	45	45	26	17	19	20
Stomach	17	2	18	6	21	8	25	12	34	15	44	27	36	19	28	34	21	26
Colon	28	23	55	45	79	66	112	108	164	141	183	196	185	199	135	211	109	195
Rectum & Rectosigmoid Junction	23	20	35	20	43	25	64	33	75	48	80	49	64	64	45	57	21	40
Pancreas	5	8	14	7	22	10	35	31	31	26	41	50	30	36	28	36	17	29
Other Gastrointestinal Tract	21	17	32	10	51	21	62	34	85	33	78	50	64	54	62	42	34	25
Trachea, Bronchus & Lung	43	46	101	68	187	127	249	155	323	234	366	242	327	204	198	126	91	72
Other Respiratory	20	2	31	7	29	6	38	14	52	11	42	14	45	7	27	9	15	3
Bone & Connective Tissue	6	4	13	3	8	3	13	11	9	5	10	3	12	17	6	9	4	8
Melanoma of Skin	24	25	26	14	31	16	22	23	34	19	32	27	24	12	19	8	10	14
Breast	4	349	3	330	3	383	4	372	6	396	4	430	1	422	4	277	1	225
Cervix Uteri	0	26	0	17	0	16	0	8	0	17	0	10	0	11	0	6	0	8
Corpus Uteri	0	46	0	72	0	94	0	87	0	101	0	95	0	83	0	44	0	33
Other Female Genital	0	61	0	61	0	57	0	54	0	60	0	71	0	60	0	51	0	42
Prostate	37	0	155	0	306	0	556	0	837	0	861	0	544	0	318	0	184	0
Other Male Genital	20	0	5	0	4	0	7	0	6	0	4	0	4	0	3	0	2	0
Urinary Bladder	35	12	42	13	46	18	88	26	150	32	180	62	139	49	122	60	80	47
Kidney & Other Urinary	13	12	38	17	36	17	38	23	61	27	55	26	46	31	37	21	16	22
Eye, Brain & Other Nervous System	26	14	18	12	15	19	25	12	24	20	28	38	17	20	15	17	9	9
Lymph Nodes	25	12	34	19	34	21	42	27	48	32	47	46	43	48	33	52	19	38
Leukemia	14	8	16	13	30	9	21	18	39	24	48	40	46	22	41	21	42	34
All Others	31	35	27	34	33	45	44	47	72	52	74	69	66	66	49	70	35	75
All Reportable Sites	422	735	694	782	1,023	970	1,505	1,112	2,117	1,323	2,234	1,569	1,738	1,469	1,196	1,168	729	965

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Note: Age groupings vary in this table; childhood cancers (0-19) are followed by 5-year groupings. See Technical Notes at the end of this report for the individual sites included in each site group.

- The most frequent cancers occurring among children and youth under age 20 differ from those occurring among adults. In 1997, the four most frequent childhood cancers were leukemia (26%); eye, brain and other central nervous system cancers (23%); lymphomas (14%); and bone and connective tissue cancers (11%). These cancers accounted for nearly three-fourths of all childhood cancers in 1997 (see page 10 for the most frequent cancers among adults).

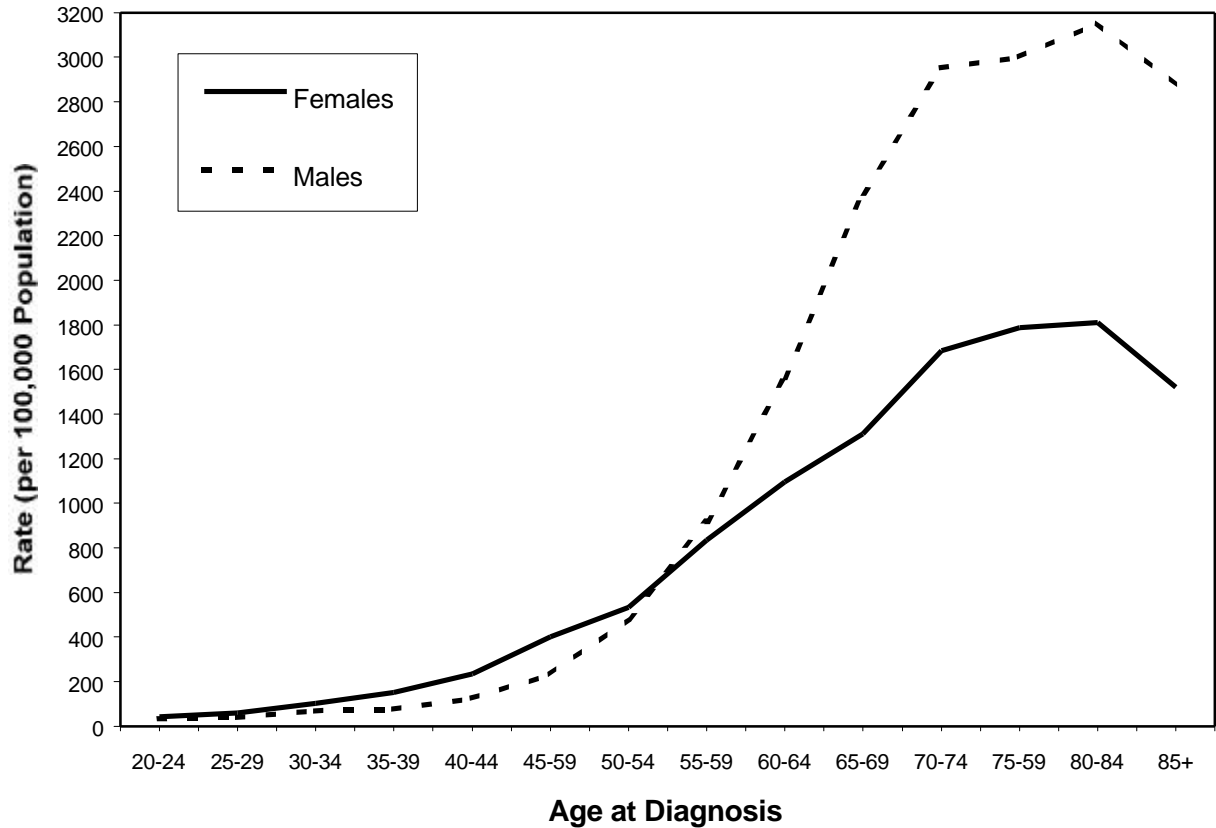
**Table 8. Number of *Invasive* Cancer Cases by Race, Age and Sex, Wisconsin, 1997**

Table of Number of Invasive Cancer Cases by Race, Age and Sex, Wisconsin, 1997								
	AGE GROUP							TOTAL
	0 - 14	15 - 24	25 - 44	45 - 64	65 - 74	75 - 84	85 +	
MALES								
White	66	74	584	3,362	4,163	2,832	704	11,785
African American	5	9	38	221	131	49	14	467
Other	5	3	16	43	31	22	6	126
Unknown	2	0	3	18	26	31	5	85
Total Males	78	86	641	3,644	4,351	2,934	729	12,463
FEMALES								
White	62	98	1,029	3,373	2,756	2,567	942	10,827
African American	3	3	66	149	98	43	12	374
Other	4	5	18	58	30	10	5	130
Unknown	1	4	8	19	8	17	6	63
Total Females	70	110	1,121	3,599	2,892	2,637	965	11,394
All Reportable Sites	148	196	1,762	7,243	7,243	5,571	1,694	23,857

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

- The largest number of cases among white males was reported for the age group 65-74. Among African-American males and males in the 'Other' race category, the largest number of cases reported was in the 45-64 age group.
- The largest number of cases among females was in the 45-64 age group, for all race categories.

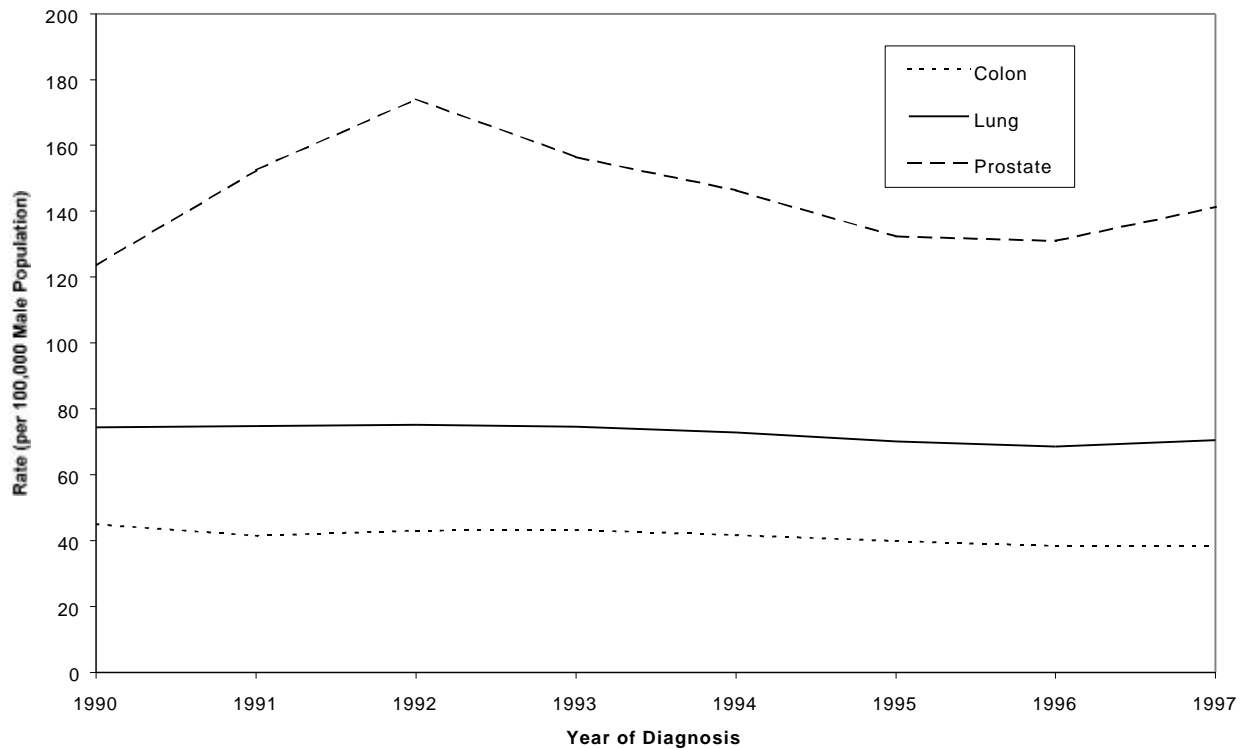
**Figure 1. Age-Specific *Invasive* Cancer Incidence Rates, by Sex, Wisconsin, 1997**



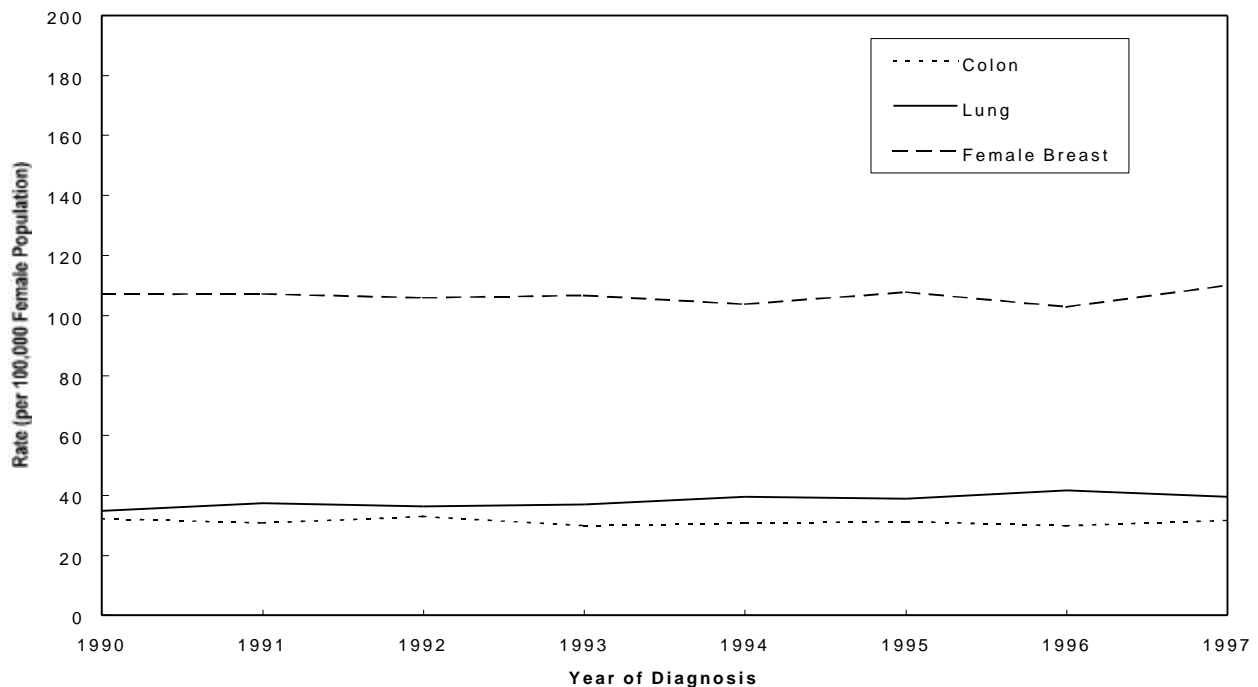
Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

- In general, cancer incidence increases with age for both males and females (until about age 80). Males have a lower incidence rate than females until about age 55, after which point male cancer incidence is noticeably higher.

**Figure 2. Age-Adjusted Male *Invasive* Cancer Incidence Rates, Wisconsin, 1990-1997**



**Figure 3. Age-Adjusted Female *Invasive* Cancer Incidence Rates, Wisconsin, 1990-1997**





**Table 9. Number and Percent of *In Situ*/Invasive Combined Cancer Cases by Site Group and Stage of Disease, Wisconsin, 1997**

	STAGE OF DISEASE										
	IN SITU		LOCAL		REGIONAL		DISTANT		NOT STATED		TOTAL
PRIMARY SITE	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number
Mouth & Pharynx	14	2.2	295	46.5	252	39.7	53	8.4	20	3.2	634
Stomach	11	2.6	120	28.3	148	34.9	106	25.0	39	9.2	424
Colon	145	5.9	739	30.2	1,015	41.5	406	16.6	143	5.8	2,448
Rectum & Rectosigmoid Junction	58	6.5	322	36.0	355	39.7	114	12.7	46	5.1	895
Pancreas	0	0.0	71	15.1	138	29.4	212	45.1	49	10.4	470
Other Gastrointestinal Tract	11	1.3	224	27.4	229	28.0	246	30.1	108	13.2	818
Trachea, Bronchus & Lung	7	0.2	774	23.8	929	28.6	1,342	41.3	200	6.2	3,252
Other Respiratory	13	3.2	203	49.6	119	29.1	44	10.8	30	7.3	409
Bone & Connective Tissue	0	0.0	114	56.2	42	20.7	34	16.7	13	6.4	203
Melanoma of Skin	191	26.5	441	61.2	49	6.8	20	2.8	20	2.8	721
Breast	707	16.3	2,360	54.4	1,008	23.2	193	4.4	72	1.7	4,340
Cervix Uteri	465	66.2	126	17.9	71	10.1	20	2.8	20	2.8	702
Corpus Uteri	21	2.9	517	72.4	122	17.1	37	5.2	17	2.4	714
Other Female Genital	65	9.7	199	29.7	131	19.5	235	35.0	41	6.1	671
Prostate	13	0.3	2,978	77.8	410	10.7	223	5.8	203	5.3	3,827
Other Male Genital	4	1.9	145	69.4	32	15.3	23	11.0	5	2.4	209
Urinary Bladder	310	25.2	711	57.8	123	10.0	40	3.3	46	3.7	1,230
Kidney & Other Urinary	17	2.9	295	49.7	127	21.4	135	22.8	19	3.2	593
Eye, Brain & Other Nervous System	4	0.8	347	70.1	72	14.5	24	4.8	48	9.7	495
Lymph Nodes	0	0.0	219	27.6	177	22.3	397	50.0	0	0.0	793
Leukemia	0	0.0	0	0.0	0	0.0	595	100.0	0	0.0	595
All Others	3	0.3	296	25.5	111	9.5	479	41.2	274	23.6	1,163
All Reportable Sites	2,059	8.0	11,496	44.9	5,660	22.1	4,978	19.4	1,413	5.5	25,606

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Notes: See Technical Notes at the end of this report for definitions of the “stage of disease” categories and the individual sites included in each site group.

- Over one-half (53%) of all Wisconsin cancers in 1997 were diagnosed at an early stage (*in situ* or local). Prostate, cervical, uterine and central nervous system cancers were diagnosed early in a high proportion of cases (over 70%).

**Table 10. Percent of *In Situ/Invasive Combined* Cancer Cases by Site Group and Diagnostic Confirmation, Wisconsin, 1997**

PRIMARY SITE	TYPE OF DIAGNOSTIC CONFIRMATION									TOTAL (NUMBER)
	POSITIVE HISTOLOGY	CYTO- LOGY/ BLOOD	MICRO- SCOPIC NOS	LAB TEST/ MARKER	SURGICAL OBSER- VATION	IMAGING	OTHER CLINICAL METHODS	AUTOPSY	NOT STATED	
Mouth & Pharynx	96.7	0.9	0.5	0.0	0.5	0.8	0.3	0.0	0.3	634
Stomach	96.5	0.7	0.2	0.0	0.5	0.9	0.2	0.2	0.7	424
Colon	94.6	0.1	0.8	0.2	0.7	1.1	0.1	0.2	2.2	2,448
Rectum & Recto- Sigmoid Junction	98.0	0.0	0.0	0.0	0.2	0.4	0.1	0.0	1.2	895
Pancreas	71.5	7.9	0.2	1.1	3.0	11.9	1.3	0.2	3.0	470
Other Gastro- Intestinal Tract	86.2	3.5	3.4	0.0	0.9	3.5	0.1	0.4	2.0	818
Trachea, Bronchus & Lung	81.6	9.7	0.5	0.0	0.2	5.8	0.5	0.3	1.4	3,252
Other Respiratory	96.3	2.2	0.5	0.0	0.0	0.0	0.0	0.7	0.2	409
Bone & Connective Tissue	98.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.5	203
Melanoma of Skin	97.6	0.0	1.9	0.0	0.0	0.0	0.0	0.1	0.3	721
Breast	98.4	0.4	0.5	0.0	0.2	0.3	0.1	0.0	0.1	4,340
Cervix Uteri	97.6	1.7	0.1	0.0	0.3	0.0	0.0	0.1	0.1	702
Corpus Uteri	99.4	0.1	0.0	0.0	0.0	0.3	0.0	0.1	0.0	714
Other Female Genital	92.1	2.5	0.6	0.6	0.0	1.6	0.3	0.0	2.2	671
Prostate	96.9	0.2	0.1	1.5	0.1	0.4	0.4	0.2	0.3	3,827
Other Male Genital	97.6	0.0	0.5	0.0	0.0	1.4	0.0	0.0	0.5	209
Urinary Bladder	97.8	0.8	0.4	0.0	0.2	0.3	0.0	0.0	0.5	1,230
Kidney & Other Urinary	89.0	1.5	4.7	0.0	0.0	3.4	0.2	0.3	0.8	593
Eye, Brain & Other Nervous System	84.4	0.2	9.3	0.0	0.6	3.0	0.4	0.6	1.4	495
Lymph Nodes	96.5	1.1	1.0	0.0	0.0	0.3	0.1	0.3	0.8	793
Leukemia	74.1	5.5	14.3	1.5	0.0	0.0	0.2	0.7	3.7	595
All Others	83.0	5.2	2.1	0.2	0.2	5.8	0.5	0.3	2.8	1,163
All Reportable Sites										
Percent	92.7	2.3	1.2	0.3	0.3	1.8	0.2	0.2	1.0	100.0
Number	23,726	578	309	81	74	466	62	50	260	25,606

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Notes: Cancers listed under "Microscopic NOS" (not otherwise specified) were diagnosed microscopically but without specification of positive histology or cytology. Percents may not add to 100 due to rounding. See Technical Notes at the end of this report for definitions of type of diagnostic confirmation.

**Table 11. Number and Percent of *In Situ/Invasive Combined* Cancer Cases by Site Group and Tumor Cell Type, Wisconsin, 1997**

PRIMARY SITE	CELL TYPE GROUP									
	CARCINOMA/ ADENOCARCINOMA		OTHER SOLID		NON-SOLID		UNKNOWN		TOTAL	
	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%
Mouth & Pharynx	547	86.3	38	6.0	43	6.8	6	1.0	634	100.0
Stomach	355	36.6	18	4.2	40	9.4	11	2.6	424	100.0
Colon	2,367	96.7	2	0.1	10	0.4	69	2.8	2,448	100.0
Rectum & Rectosigmoid Junction	869	97.1	4	0.4	4	0.4	18	2.0	895	100.0
Pancreas	402	85.5	5	1.1	4	0.9	59	12.6	470	100.0
Other Gastrointestinal Tract	688	84.1	44	5.4	46	5.6	40	4.9	818	100.0
Trachea, Bronchus & Lung	3,020	92.9	44	1.4	16	0.5	172	5.3	3,252	100.0
Other Respiratory	291	71.6	91	22.2	22	5.4	5	1.2	409	100.0
Bone & Connective Tissue	0	0.0	164	80.8	38	18.7	1	0.5	203	100.0
Melanoma of Skin	0	0.0	721	100.0	0	0.0	0	0.0	721	100.0
Breast	4,265	98.3	41	0.9	7	0.2	27	0.6	4,340	100.0
Cervix Uteri	686	97.7	13	1.9	0	0.0	3	0.4	702	100.0
Corpus Uteri	656	91.9	54	7.6	0	0.0	4	0.6	714	100.0
Other Female Genital	574	85.6	70	10.4	0	0.0	18	2.7	671	100.0
Prostate	3,806	99.5	0	0.0	0	0.0	21	0.6	3,827	100.0
Other Male Genital	23	11.0	179	85.6	5	2.4	2	1.0	209	100.0
Urinary Bladder	1,190	96.7	27	2.2	2	0.2	11	0.9	1,230	100.0
Kidney & Other Urinary	563	94.9	7	1.2	5	0.8	18	3.0	593	100.0
Eye, Brain & Other Nervous System	8	1.6	422	85.3	53	10.7	12	2.4	495	100.0
Lymph Nodes	0	0.0	0	0.0	793	100.0	0	0.0	793	100.0
Leukemia	0	0.0	0	0.0	595	100.0	0	0.0	595	100.0
All Others	523	45.0	249	21.4	306	26.3	85	7.3	1,163	100.0
All Reportable Sites	20,833	81.4	2,202	8.6	1,989	7.8	582	2.3	25,606	100.0

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Notes: Percents may not add to 100 due to rounding. See Technical Notes at the end of this report for the individual sites included in each site group.

- Tumor cell type is often closely related to the type of tissue in which the tumor originated. The majority of cancers reported (81%) were solid tumors such as carcinomas (developing from epithelial cells in the skin or organ surface) and adenocarcinomas (tumors developed from glandular tissue).
- Other solid tumors include sarcomas (originating from bone, cartilage, fat, muscle, or other connective tissue), nerve cell and germ cell tumors. Lymphomas, leukemias and plasma cell tumors are nonsolid tumors.

**Table 12. Number and Age-Adjusted Rate of Cancer Deaths by Site Group and Sex, Wisconsin, 1997**

PRIMARY SITE	MALE		FEMALE		TOTAL	
	Number	Rate	Number	Rate	Number	Rate
Mouth & Pharynx	100	3.7	49	1.2	149	2.4
Stomach	144	4.9	84	1.8	228	3.1
Colon	468	16.2	521	11.8	989	13.7
Rectum & Rectosigmoid Junction	97	3.5	79	1.9	176	2.6
Pancreas	256	9.2	272	6.7	528	7.9
Other Gastrointestinal Tract	404	14.7	248	6.3	652	10.1
Trachea, Bronchus & Lung	1,555	55.8	1,128	31.6	2,683	42.0
Other Respiratory	75	2.7	19	0.6	94	1.5
Bone & Connective Tissue	63	2.3	62	1.8	125	2.0
Melanoma of Skin	84	3.0	47	1.3	131	2.1
Breast	6	0.2	785	21.0	791	11.7
Cervix Uteri	0	0.0	72	2.4	72	1.2
Corpus Uteri	0	0.0	67	1.7	67	1.0
Other Female Genital	0	0.0	397	10.8	397	6.0
Prostate	691	22.5	0	0.0	691	8.8
Other Male Genital	12	0.4	0	0.0	12	0.2
Urinary Bladder	170	5.7	77	1.7	247	3.3
Kidney & Other Urinary	153	5.6	104	2.9	257	4.1
Eye, Brain & Other Nervous System	149	5.4	133	3.9	282	4.6
Lymphoma	289	10.2	262	6.0	551	8.0
Leukemia	262	9.2	208	5.4	470	7.0
All Others	446	15.6	494	12.2	940	13.6
Total Cancer Deaths	5,424	190.7	5,108	133.0	10,532	156.8

Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Notes: Male rates are deaths per 100,000 male residents, female rates are deaths per 100,000 female residents and total rates are deaths per 100,000 residents. All rates are age-adjusted to the 1970 United States population. "Total cancer deaths" include all reportable cancer deaths except deaths from nonmelanoma skin cancer (see Technical Notes on page 48). See Technical Notes at the end of this report for the individual sites included in each site group.

- The 1997 age-adjusted cancer mortality rate for males of 191 deaths per 100,000 population was lower than the 1996 rate (196 per 100,000).
- The female cancer mortality rate remained relatively constant (133 per 100,000 in 1997 and 132 per 100,000 in 1996).
- Wisconsin cancer mortality has been slowly decreasing since 1990. From 1990 to 1997, the overall age-adjusted cancer mortality rate has decreased by 11 deaths per 100,000 population (from 168 to 157 per 100,000).

**Table 13. Number and Percent of Cancer Deaths by Site Group and Race : Males, Wisconsin, 1997**

PRIMARY SITE	White		African American		Other		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Mouth & Pharynx	90	1.7	9	4.6	1	2.4	100	1.8
Stomach	136	2.6	7	3.6	1	2.4	144	2.7
Colon	449	8.7	15	7.7	4	9.8	468	8.6
Rectum & Rectosigmoid Junction	92	1.8	3	1.5	2	4.9	97	1.8
Pancreas	245	4.7	8	4.1	3	7.3	256	4.7
Other Gastrointestinal Tract	379	7.3	21	10.8	4	9.8	404	7.4
Trachea, Bronchus & Lung	1,470	28.3	69	35.6	16	39.0	1,555	28.7
Other Respiratory	72	1.4	3	1.5	0	0.0	75	1.4
Bone & Connective Tissue	61	1.2	1	0.5	1	2.4	63	1.2
Melanoma of Skin	84	1.6	0	0.0	0	0.0	84	1.6
Breast	6	0.1	0	0.0	0	0.0	6	0.1
Prostate	672	13.0	18	9.3	1	2.4	691	12.7
Other Male Genital	12	0.2	0	0.0	0	0.0	12	0.2
Urinary Bladder	167	3.2	3	1.5	0	0.0	170	3.1
Kidney & Other Urinary	151	2.9	1	0.5	1	2.4	153	2.8
Eye, Brain & Other Nervous System	143	2.8	5	2.6	1	2.4	149	2.8
Lymphoma	281	5.4	5	2.6	3	7.3	289	5.3
Leukemia	253	4.9	8	4.1	1	2.4	262	4.8
All Others	426	8.2	18	9.3	2	4.9	446	8.2
Total Cancer Deaths	5,189	100.0	194	100.0	41	100.0	5,424	100.0

Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Notes: “Total cancer deaths” include all reportable cancer deaths except deaths from nonmelanoma skin cancer (see Technical Notes on page 48). Percents are calculated from the total number of deaths in each race category. See Technical Notes at the end of this report for the individual sites included in each site group.

- The three leading sites of cancer deaths among Wisconsin males, all races combined, in 1997 were lung cancer (29%), prostate cancer (13%), and colon cancer (9%).
- Lung cancer was the leading cause of cancer death among males of all races. Prostate was the second leading cause of cancer death for white and African American males.

**Table 14. Number and Percent of Cancer Deaths by Site Group and Race : Females, Wisconsin, 1997**

PRIMARY SITE	White		African American		Other		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Mouth & Pharynx	47	1.0	2	1.2	0	0.0	49	1.0
Stomach	77	1.6	4	2.3	3	6.7	84	1.6
Colon	506	10.3	11	6.4	4	8.9	521	10.2
Rectum & Rectosigmoid Junction	75	1.5	4	2.3	0	0.0	79	1.6
Pancreas	256	5.2	14	8.2	2	4.4	272	5.3
Other Gastrointestinal Tract	230	4.7	11	6.4	7	15.6	248	4.9
Trachea, Bronchus & Lung	1,069	21.9	46	26.9	13	28.9	1,128	22.1
Other Respiratory	17	0.3	1	0.6	1	2.2	19	0.4
Bone & Connective Tissue	59	1.2	3	1.8	0	0.0	62	1.2
Melanoma of Skin	47	1.0	0	0.0	0	0.0	47	0.9
Breast	763	15.6	22	12.9	0	0.0	785	15.4
Cervix Uteri	61	1.2	8	4.7	3	6.7	72	1.4
Corpus Uteri	63	1.3	4	2.3	0	0.0	67	1.3
Other Female Genital	386	7.9	9	5.3	2	4.4	397	7.8
Urinary Bladder	76	1.6	1	0.6	0	0.0	77	1.5
Kidney & Other Urinary	102	2.1	0	0.0	2	4.4	104	2.0
Eye, Brain & Other Nervous System	129	2.6	3	1.8	1	2.2	133	2.6
Lymphoma	249	5.1	11	6.4	2	4.4	262	5.1
Leukemia	200	4.1	6	3.5	2	4.4	208	4.1
All Others	480	9.8	11	6.4	3	6.7	494	9.7
Total Cancer Deaths	4,892	100.0	171	100.0	45	100.0	5,108	100.0

Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Notes: "Total cancer deaths" include all reportable cancer deaths except deaths from nonmelanoma skin cancer (see Technical Notes on page 48). Percents are calculated from the total number of deaths in each race category. See Technical Notes at the end of this report for the individual sites included in each site group.

- Lung cancer was the leading cause of cancer death among females in all race groups in 1997, accounting for 22 percent of all female cancer deaths.
- As in 1996, breast cancer was the second leading cause of cancer death among white and African American females, accounting for 16 percent and 13 percent, respectively, of their cancer deaths.

**Table 15. Number and Age-Adjusted Rate of Cancer Deaths by Major Site Group and Region, Wisconsin, 1997**

PRIMARY SITE		REGION					
		SOUTH	SOUTHEAST	NORTHEAST	WEST	NORTH	TOTAL
Colorectal	NUMBER	182	391	270	198	124	1,165
	RATE	14.7	15.2	17.2	18.8	17.5	16.3
Other Gastrointestinal Tract	NUMBER	229	622	324	200	182	1,557
	RATE	20.5	26.4	21.4	20.8	26.5	23.5
Respiratory	NUMBER	496	1,067	621	342	251	2,777
	RATE	45.0	46.9	42.7	38.7	37.9	45.5
Breast	NUMBER	126	300	182	96	87	791
	RATE	10.9	12.4	11.6	10.4	12.2	11.7
Female Genital	NUMBER	101	204	111	73	47	536
	RATE	9.1	8.5	7.6	7.7	7.4	8.2
Male Genital	NUMBER	107	238	161	113	84	703
	RATE	8.2	8.5	9.5	9.2	10.7	9.0
Urinary Tract	NUMBER	91	179	117	61	56	504
	RATE	7.6	7.4	7.7	6.5	7.8	7.4
Lymphoma & Leukemia	NUMBER	159	378	232	144	108	1,021
	RATE	14.1	15.4	14.7	15.7	14.9	15.0
All Others	NUMBER	256	580	304	206	132	1,478
	RATE	22.6	24.4	20.8	21.1	19.7	22.5
Total Cancer Deaths	NUMBER	1,747	3,959	2,322	1,433	1,071	10,532
	RATE	152.6	165.0	153.1	148.8	154.6	156.8

Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Notes: Rates are deaths per 100,000 residents, age-adjusted to the 1970 United States population. The regions used are the Department of Health and Family Services Regions; see Map on page 61 for regional boundaries. "Total cancer deaths" include all reportable cancer deaths except deaths from nonmelanoma skin cancer (see Technical Notes on page 48). See Technical Notes at the end of this report for the individual sites included in each major site group.

- The Southeastern region of Wisconsin experienced a higher cancer mortality rate (165 deaths per 100,000 population) than did the state as a whole (157 per 100,000). The other regions had cancer mortality rates somewhat lower than the statewide rate.

**Table 16. Number and Age-Adjusted Rate of Cancer Deaths by Major Site Group, Counties Over 100,000 Population, Wisconsin, 1997**

Primary Site		Brown	Dane	Kenosha	La Crosse	Marathon	Milwaukee	Outagamie
Colorectal	Number	36	49	21	33	27	199	23
	Rate	14.2	11.8	11.2	25.4	16.2	16.1	12.7
Other Gastro- Intestinal Tract	Number	56	76	36	22	46	329	39
	Rate	22.2	20.5	21.8	18.2	29.4	29.2	22.2
Respiratory	Number	93	142	73	47	47	562	82
	Rate	39.2	36.7	46.0	41.2	31.2	50.6	50.1
Breast	Number	37	34	24	13	18	150	20
	Rate	14.7	8.0	15.1	-	-	12.7	11.6
Female Genital	Number	19	38	11	12	8	119	9
	Rate	-	9.1	-	-	-	10.4	-
Male Genital	Number	19	32	18	14	20	115	25
	Rate	-	7.3	-	-	11.8	8.1	14.2
Urinary Tract	Number	23	28	12	8	14	88	10
	Rate	9.2	6.8	-	-	-	7.5	-
Leukemia & Lymph Nodes	Number	32	73	21	16	20	195	30
	Rate	12.3	18.7	10.9	-	12.4	16.1	18.2
All Others	Number	46	93	30	29	22	300	46
	Rate	19.3	24.0	17.7	24.0	13.7	26.2	25.3
Total Cancer Deaths		361	565	246	194	222	2,057	284
		147.0	142.9	145.2	154.6	138.5	176.9	164.5

Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Note: Rates are deaths per 100,000 residents, age-adjusted to the 1970 United States population. Rates for fewer than 20 deaths are omitted because they are subject to large random variation. See Technical Notes at the end of this report for the individual sites included in each major site group. In this table, the major site group “Other Gastrointestinal Tract” includes the site group “Mouth and Pharynx.”

(Table continued on next page)



**Table 16. Number and Age-Adjusted Rate of Cancer Deaths by Major Site Group, Counties Over 100,000 Population, Wisconsin, 1997 (continued)**

Primary Site		Racine	Rock	Sheboygan	Waukesha	Washington	Winnebago	State Total
Colorectal	Number	40	31	41	56	19	32	1,165
	Rate	16.5	15.0	24.0	13.8	-	17.2	16.3
Other Gastro-Intestinal Tract	Number	66	40	35	79	26	41	1,557
	Rate	28.8	21.1	20.8	20.2	20.8	21.5	23.5
Respiratory	Number	104	103	70	168	41	96	2,777
	Rate	46.4	55.3	46.5	45.4	34.1	50.0	43.5
Breast	Number	24	25	20	48	17	18	791
	Rate	11.3	12.4	12.9	11.6	-	-	11.7
Female Genital	Number	14	15	11	27	8	16	536
	Rate	-	-	-	7.0	-	-	8.2
Male Genital	Number	21	15	23	40	15	17	703
	Rate	8.6	-	12.3	9.7	-	-	9.0
Urinary Tract	Number	15	15	16	27	10	13	504
	Rate	-	-	-	6.8	-	-	7.4
Leukemia & Lymph Nodes	Number	37	32	34	62	22	30	1,021
	Rate	15.8	15.6	21.5	16.3	17.4	14.2	15.0
All Others	Number	51	41	28	110	20	50	1,478
	Rate	23.1	21.0	19.0	28.2	15.2	25.9	22.3
All Reportable Sites	Number	372	317	278	617	178	313	10,532
	Rate	163.2	163.0	174.6	159.0	136.5	160.0	156.8

Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Note: Rates are deaths per 100,000 residents, age-adjusted to the 1970 United States population. Rates for fewer than 20 deaths are omitted because they are subject to large random variation. See Technical Notes at the end of this report for the individual sites included in each major site group. In this table, the major site group “Other Gastrointestinal Tract” includes the site group “Mouth and Pharynx.”

- Counties with cancer mortality rates below the statewide rate (157 per 100,000 population) included Brown, Dane, Kenosha, La Crosse, Marathon and Washington. Cancer mortality rates in Milwaukee, Outagamie, Racine, Rock, Sheboygan, Waukesha and Winnebago counties were above the statewide rate.

**Table 17. Number of Cancer Deaths by Site Group, Age and Sex, Wisconsin, 1997**

PRIMARY SITE	AGE AND SEX														
				0-19		20-24		25-29		30-34		35-39		40-44	
	Total	Males	Females	M	F	M	F	M	F	M	F	M	F	M	F
Mouth & Pharynx	149	100	49	0	0	0	0	0	0	0	0	1	0	0	1
Stomach	228	144	84	0	0	0	0	1	0	2	0	1	1	6	2
Colon	989	468	521	0	0	0	0	0	2	2	2	3	3	3	5
Rectum & Rectosigmoid Junction	176	97	79	0	0	0	0	0	0	0	0	0	0	1	2
Pancreas	528	256	272	0	0	0	0	0	0	1	0	1	0	3	2
Other Gastrointestinal Tract	652	404	248	0	1	0	0	1	0	2	0	4	1	6	3
Trachea, Bronchus & Lung	2,683	1,555	1,128	0	0	0	0	0	0	1	0	5	7	17	18
Other Respiratory	94	75	19	0	0	1	0	0	0	0	0	1	0	1	0
Bone & Connective Tissue	125	63	62	1	5	3	2	2	0	2	1	3	2	1	3
Melanoma of Skin	131	84	47	0	0	0	0	1	0	3	1	2	3	5	3
Breast	791	6	785	0	0	0	0	0	3	0	9	0	22	0	27
Cervix Uteri	72	0	72	0	0	0	0	0	0	0	2	0	5	0	9
Corpus Uteri	67	0	67	0	0	0	0	0	0	0	1	0	0	0	0
Other Female Genital	397	0	397	0	0	0	0	0	1	0	2	0	7	0	10
Prostate	691	691	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Male Genital	12	12	0	0	0	1	0	1	0	0	0	2	0	0	0
Urinary Bladder	247	170	77	0	0	0	0	0	0	0	0	0	0	0	0
Kidney & Other Urinary	257	153	104	1	0	0	0	0	0	0	0	1	0	3	1
Eye, Brain & Other Nervous System	282	149	133	3	6	5	1	3	1	2	2	3	6	10	5
Lymph Nodes	551	289	262	0	0	4	0	3	0	2	3	6	2	11	10
Leukemia	470	262	208	11	6	4	3	0	2	0	1	3	7	5	3
All Others	940	446	494	3	3	2	0	0	1	1	0	2	6	8	10
Total Cancer Deaths	10,532	5,424	5,108	19	21	20	6	12	10	18	24	38	72	80	114

Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Note: Age groupings vary in this table; childhood cancers (0-19) are followed by 5-year groupings. "Total cancer deaths" include all reportable cancer deaths except deaths from nonmelanoma skin cancer (see Technical Notes on page 48). See Technical Notes at the end of this report for the individual sites included in each site group.

(Table continued on next page)

**Table 17. Number of Cancer Deaths by Site Group, Age and Sex, Wisconsin, 1997 (Continued)**

	AGE AND SEX																	
	45-49		50-54		55-59		60-64		65-69		70-74		75-79		80-84		85+	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Mouth & Pharynx	5	1	9	1	13	3	12	5	21	4	16	8	9	7	7	9	7	10
Stomach	6	0	7	2	9	2	6	5	20	6	19	7	24	8	22	21	21	30
Colon	9	7	19	16	31	13	42	26	61	48	62	74	77	73	75	99	84	153
Rectum & Rectosigmoid Junction	5	2	5	3	4	4	11	4	21	10	14	12	11	9	15	15	10	18
Pancreas	4	2	16	9	20	9	30	28	40	25	51	42	33	50	28	50	29	55
Other Gastrointestinal Tract	13	5	16	4	34	13	49	25	86	29	74	33	45	38	42	39	32	57
Trachea, Bronchus & Lung	21	25	70	55	107	80	183	122	274	165	282	194	270	182	208	159	117	121
Other Respiratory	4	1	3	0	7	4	9	2	12	3	9	3	11	3	9	2	8	1
Bone & Connective Tissue	4	3	0	2	6	3	7	3	6	9	9	7	8	9	6	7	5	6
Melanoma of Skin	7	3	2	2	9	4	8	7	12	2	16	4	9	4	7	4	3	10
Breast	0	55	0	53	0	55	0	55	4	79	0	86	2	105	0	102	0	134
Cervix Uteri	0	10	0	8	0	10	0	12	0	4	0	1	0	6	0	3	0	2
Corpus Uteri	0	1	0	4	0	5	0	1	0	10	0	14	0	10	0	11	0	10
Other Female Genital	0	17	0	17	0	28	0	37	0	40	0	64	0	69	0	52	0	53
Prostate	0	0	6	0	13	0	14	0	60	0	102	0	161	0	167	0	168	0
Other Male Genital	1	0	0	0	1	0	2	0	0	0	1	0	1	0	1	0	1	0
Urinary Bladder	5	2	3	0	5	2	9	5	14	3	26	14	40	10	31	16	37	25
Kidney & Other Urinary	5	4	9	6	13	4	21	16	27	15	22	18	25	9	16	13	10	18
Eye, Brain & Other Nervous System	13	14	14	9	6	9	16	3	21	17	22	19	16	19	10	15	5	7
Lymph Nodes	11	7	16	3	18	7	26	13	47	19	44	43	47	37	34	51	20	67
Leukemia	4	5	10	9	16	9	15	8	26	26	44	29	49	33	40	25	35	42
All Others	18	10	15	15	23	26	42	43	73	46	57	58	66	80	79	67	57	129
Total Cancer Deaths	135	174	220	218	335	290	502	420	825	560	870	730	904	761	797	760	649	948

Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Note: Age groupings vary in this table; childhood cancers (0-19) are followed by 5-year groupings. “Total cancer deaths” include all reportable cancer deaths except deaths from nonmelanoma skin cancer (see Technical Notes on page 48). See Technical Notes at the end of this report for the individual sites included in each site group.

- The distribution of cancer deaths in 1997 shows that deaths increase for all types of cancer as age increases; 74 percent of cancer deaths occurred among those aged 65 or older.
- In 1997, 95 percent of all prostate cancer deaths occurred among males age 65 and older. Sixty-four percent of female breast cancer deaths occurred at age 65 or older.
- Eighty-two percent of colon cancer deaths and 74 percent of lung cancer deaths occurred among those aged 65 and older.

**Table 18. Number of Cancer Deaths by Race, Age and Sex, Wisconsin, 1997**

AGE GROUP								
	0 – 14	15 - 24	25 - 44	45 - 64	65 - 74	75 - 84	85 +	TOTAL
MALES								
White	11	23	136	1,094	1,615	1,672	638	5,189
African American	2	2	9	83	67	22	9	194
Other	0	1	3	15	13	7	2	41
Total Males	13	26	148	1,192	1,695	1,701	649	5,424
FEMALES								
White	14	12	198	1,027	1,227	1,485	929	4,892
African American	0	1	17	58	53	28	14	171
Other	0	0	5	17	10	8	5	45
Total Females	14	13	220	1,102	1,290	1,521	948	5,108
Total Cancer Deaths	27	39	368	2,294	2,985	3,222	1,597	10,532

Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services.

Note: “Total cancer deaths” include all reportable cancer deaths except deaths from nonmelanoma skin cancer (see Technical Notes on page 48).

- African-American males and males in the "Other" race group tend to die from cancer at an earlier age than white males. In 1997, the highest number of cancer deaths among African American males and males in the “Other” race group occurred at ages 45-64. Cancer deaths tended to occur at older ages among white males: the highest number of deaths occurred at ages 75-84, followed closely by ages 65-74.
- African American females and females in the “Other” race category also tend to die younger from cancer than white females. The highest number of cancer deaths in those groups occurred at ages 45-64, compared with ages 75-84 among white females.

**Table 19. Average Number of Months Between Diagnosis and Death, by Age at Diagnosis, Wisconsin, 1997**

PRIMARY SITE	AGE AT DIAGNOSIS IN YEARS							
	UNDER 65		65 - 74		75 - 84		85 AND OVER	
	DEATHS	MONTHS	DEATHS	MONTHS	DEATHS	MONTHS	DEATHS	MONTHS
Mouth & Pharynx	128	49.5	112	35.6	49	35.3	11	-
Stomach	81	24.7	96	22.8	100	21.4	51	11.8
Colon	308	38.9	345	38.8	368	30.1	154	16.3
Rectum & Rectosigmoid Junction	131	51.7	122	50.3	125	29.8	35	18.1
Pancreas	119	8.9	144	8.9	115	6.8	52	4.8
Other Gastrointestinal Tract	211	14.4	210	13.7	155	12.5	59	4.8
Trachea, Bronchus & Lung	867	19.7	941	15.0	709	10.2	134	5.4
Other Respiratory	95	48.9	72	44.3	44	22.6	12	-
Bone & Connective Tissue	59	51.7	26	40.7	33	37.0	9	-
Melanoma of Skin	77	60.8	41	40.9	30	33.4	14	-
Breast	511	78.6	258	82.4	184	56.6	66	33.9
Cervix Uteri	97	64.0	12	-	10	-	4	-
Corpus Uteri	73	66.3	65	67.0	45	37.4	10	-
Other Female Genital	156	45.9	101	38.0	90	21.3	29	15.3
Prostate	147	89.2	409	72.3	328	49.7	74	32.0
Other Male Genital	16	-	5	-	7	-	0	-
Urinary Bladder	89	90.1	148	56.4	138	34.9	52	22.1
Kidney & Other Urinary	116	45.3	109	33.8	77	23.1	21	10.0
Eye, Brain & Other Nervous System	152	38.8	81	13.9	53	9.6	7	-
Lymph Nodes	169	64.3	117	47.7	112	19.3	39	11.8
Leukemia	205	47.7	185	33.4	162	20.5	69	12.6
All Others	129	25.0	127	21.3	130	10.6	58	5.3
Total	3,936	44.8	3,726	36.9	3,064	25.1	960	14.8

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Notes: This table includes cancer deaths (where cancer was listed as the underlying cause of death on the death certificate) that occurred among Wisconsin residents in 1997 and matched a reported cancer diagnosis filed with the Wisconsin Cancer Reporting System since 1978. *Each tumor is counted separately for persons with multiple tumors.* See Technical Notes on page 50 for the criteria used to determine a match between the incidence and death reports. Average months-to-death based on fewer than 20 deaths per age group are omitted because of potential large random fluctuations. See Technical Notes at the end of this report for the individual sites included in each major site group.

- Among 1997 cancer deaths that were linked to a tumor previously reported to WCRS and diagnosed since 1978, the average number of months between diagnosis and death decreased as age at diagnosis increased: 45 months for cases diagnosed before age 65, to 15 months for cases diagnosed at ages 85 and older.

**Table 20. Average Number of Months Between Diagnosis and Death, by Stage of Disease at Diagnosis, Wisconsin, 1997**

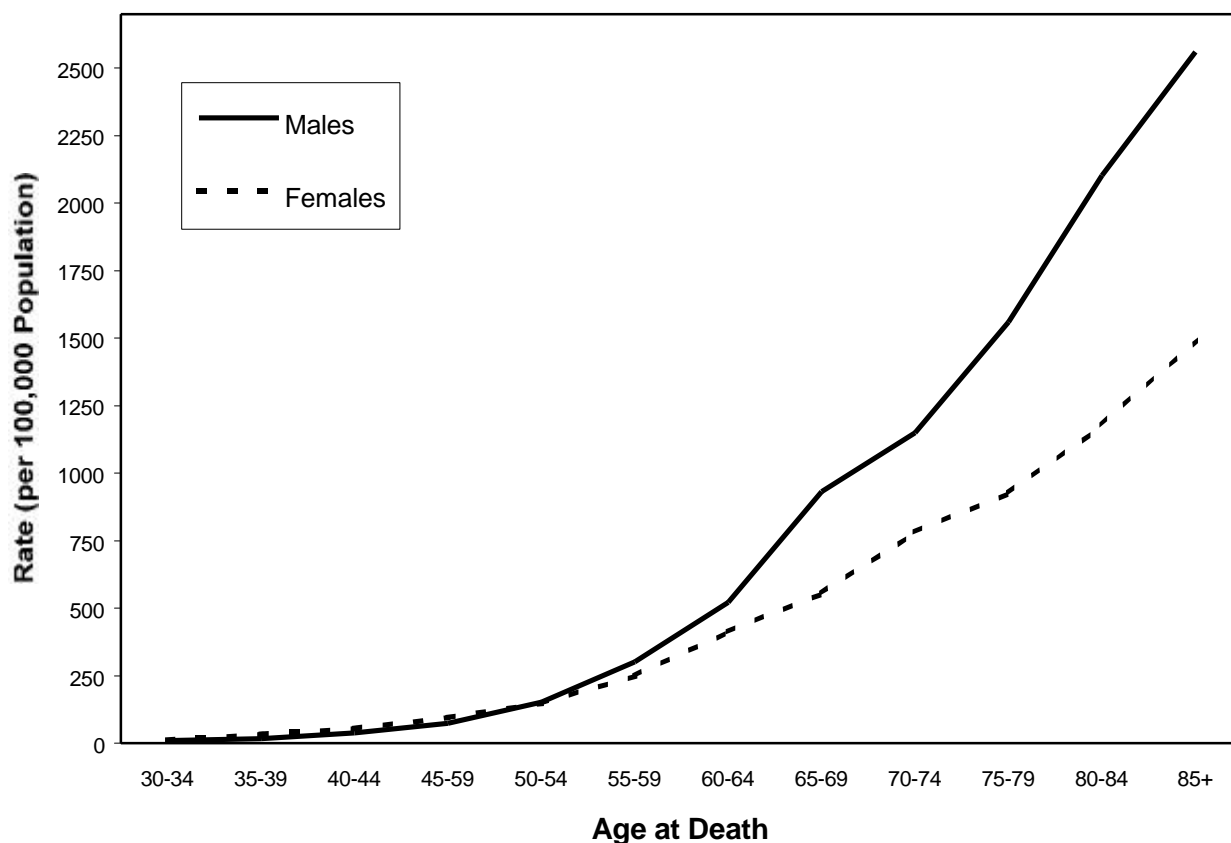
PRIMARY SITE	STAGE OF DISEASE							
	IN SITU & LOCAL		REGIONAL		DISTANT		NOT STATED	
	DEATHS	MONTHS	DEATHS	MONTHS	DEATHS	MONTHS	DEATHS	MONTHS
Mouth & Pharynx	103	58.1	133	32.9	31	20.9	33	35.8
Stomach	63	30.6	141	27.3	88	9.0	36	10.1
Colon	193	55.7	474	39.9	374	14.2	134	29.7
Rectum & Recto-sigmoid Junction	106	65.9	146	42.8	110	15.1	51	46.5
Pancreas	52	13.2	129	10.4	190	4.6	59	7.9
Other Gastrointestinal Tract	137	18.7	162	16.4	230	7.6	106	11.1
Trachea, Bronchus & Lung	466	31.2	729	16.8	1,183	7.4	273	13.5
Other Respiratory	93	61.2	77	26.9	20	14.6	33	26.9
Bone & Connective Tissue	50	49.2	18	-	22	23.7	37	43.5
Melanoma of Skin	97	57.8	18	-	17	-	30	38.6
Breast	405	86.1	379	74.2	141	30.4	94	72.2
Cervix Uteri	47	101.3	48	41.5	18	-	10	-
Corpus Uteri	100	75.0	46	49.7	30	13.6	17	-
Other Female Genital	59	66.4	77	38.7	184	27.3	56	25.7
Prostate	511	73.4	148	71.2	176	41.7	123	48.7
Other Male Genital	11	-	8	0	6	-	3	-
Urinary Bladder	257	67.5	84	33.2	42	9.7	44	40.5
Kidney & Other Urinary	105	60.7	54	34.9	129	12.8	35	29.9
Eye, Brain & Other Nervous System	181	29.5	40	14.2	18	-	54	25.5
Lymph Nodes	66	43.4	72	49.8	172	32.4	127	55.4
Leukemia	0	-	0	-	621	32.4	0	-
All Others	39	42.7	21	55.3	164	11.9	220	13.0
Total	3,141	57.3	3,004	36.5	3,966	17.3	1,575	29.6

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Notes: This table includes those cancer deaths (where cancer was listed as the underlying cause of death on the death certificate) that occurred among Wisconsin residents in 1997 and matched a reported cancer diagnosis filed with the Wisconsin Cancer Reporting System since 1978. *Each tumor is counted separately for persons with multiple tumors.* See Technical Notes on page 50 for the criteria used to determine a match between incidence and death reports. Average months-to-death based on fewer than 20 deaths are omitted because of potential large random fluctuations. See Technical Notes at the end of this report for the individual sites included in each major site group.

- Among 1997 cancer deaths linked to a tumor previously reported to WCRS and diagnosed since 1978, the average length of time between diagnosis and death was at least three times longer when cancers were diagnosed at the early stage as when they were diagnosed at the distant stage. The average number of months before death was 57 months for cancers diagnosed at a local stage, 36 months for cancers diagnosed at the regional stage and 17 months for cancers diagnosed at a distant stage.

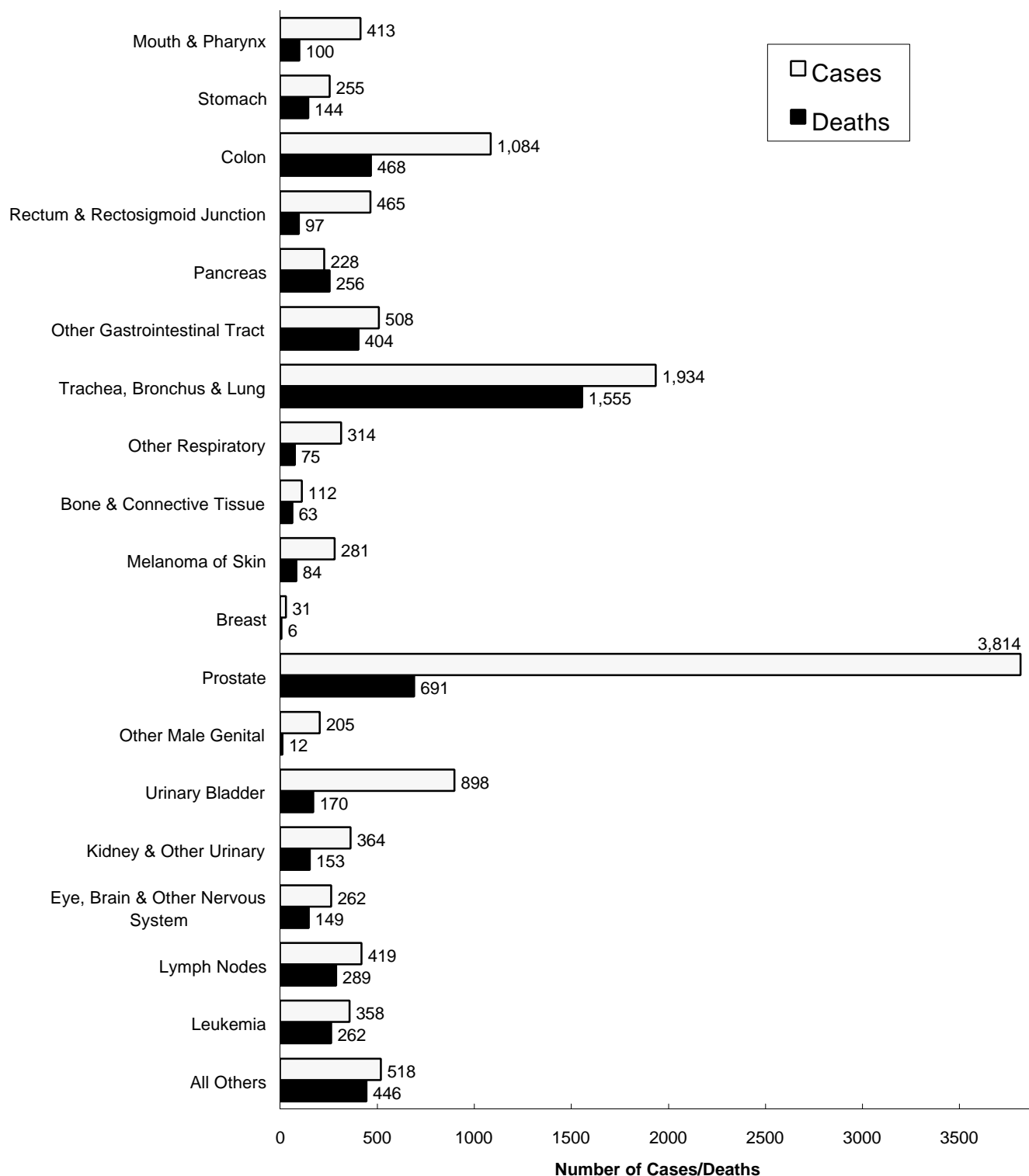
**Figure 4. Age-Specific Cancer Mortality Rates, by Sex, Wisconsin, 1997**



Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

- Cancer mortality rates rise steadily with age for both males and females. After age 50, the male mortality rate is higher than the female mortality rate; the difference increases sharply with increasing age.

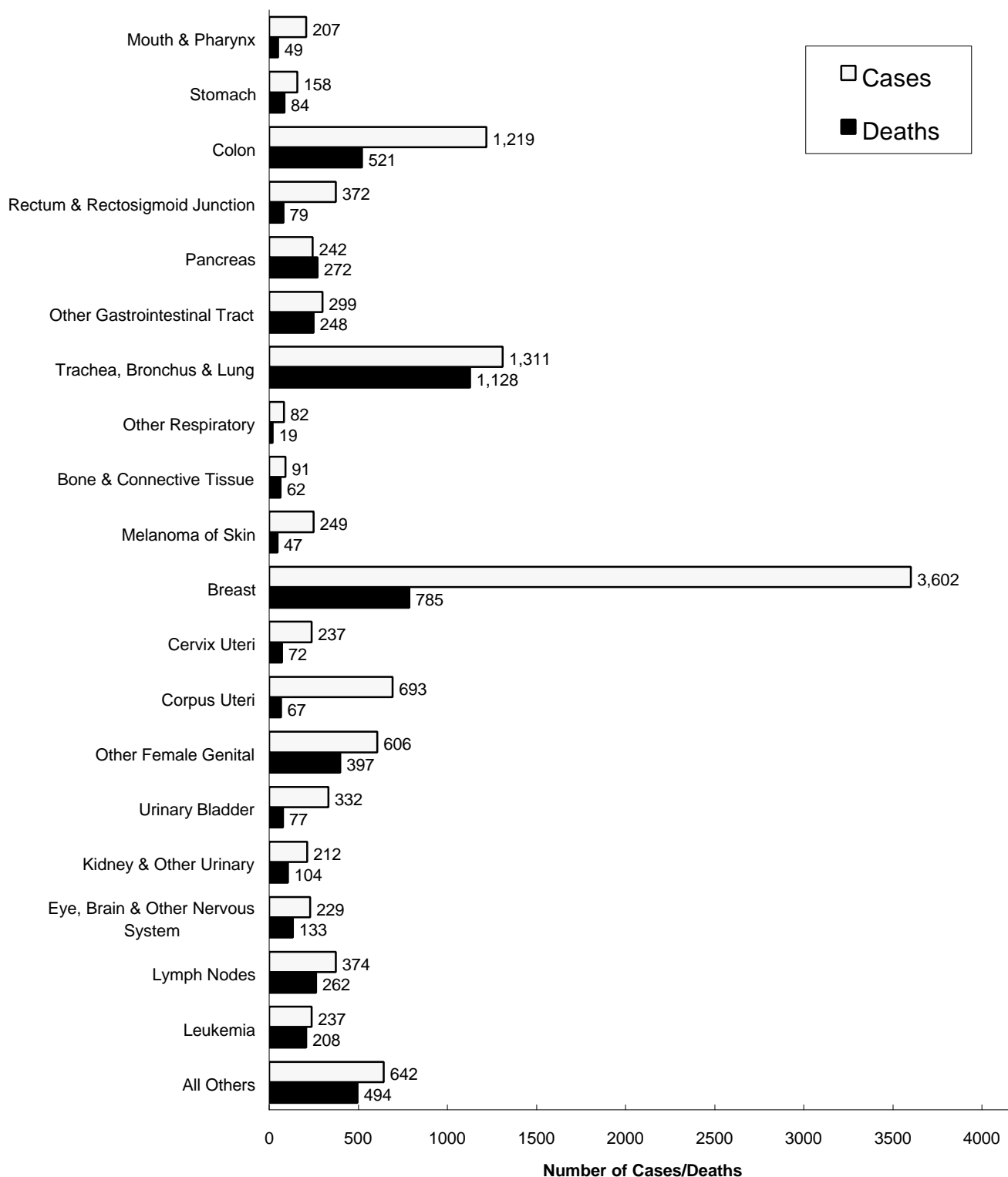
**Figure 5. Number of *Invasive* Cancer Cases and Deaths by Site Group:  
Males, Wisconsin, 1997**



Source: Wisconsin Cancer Reporting System and the 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

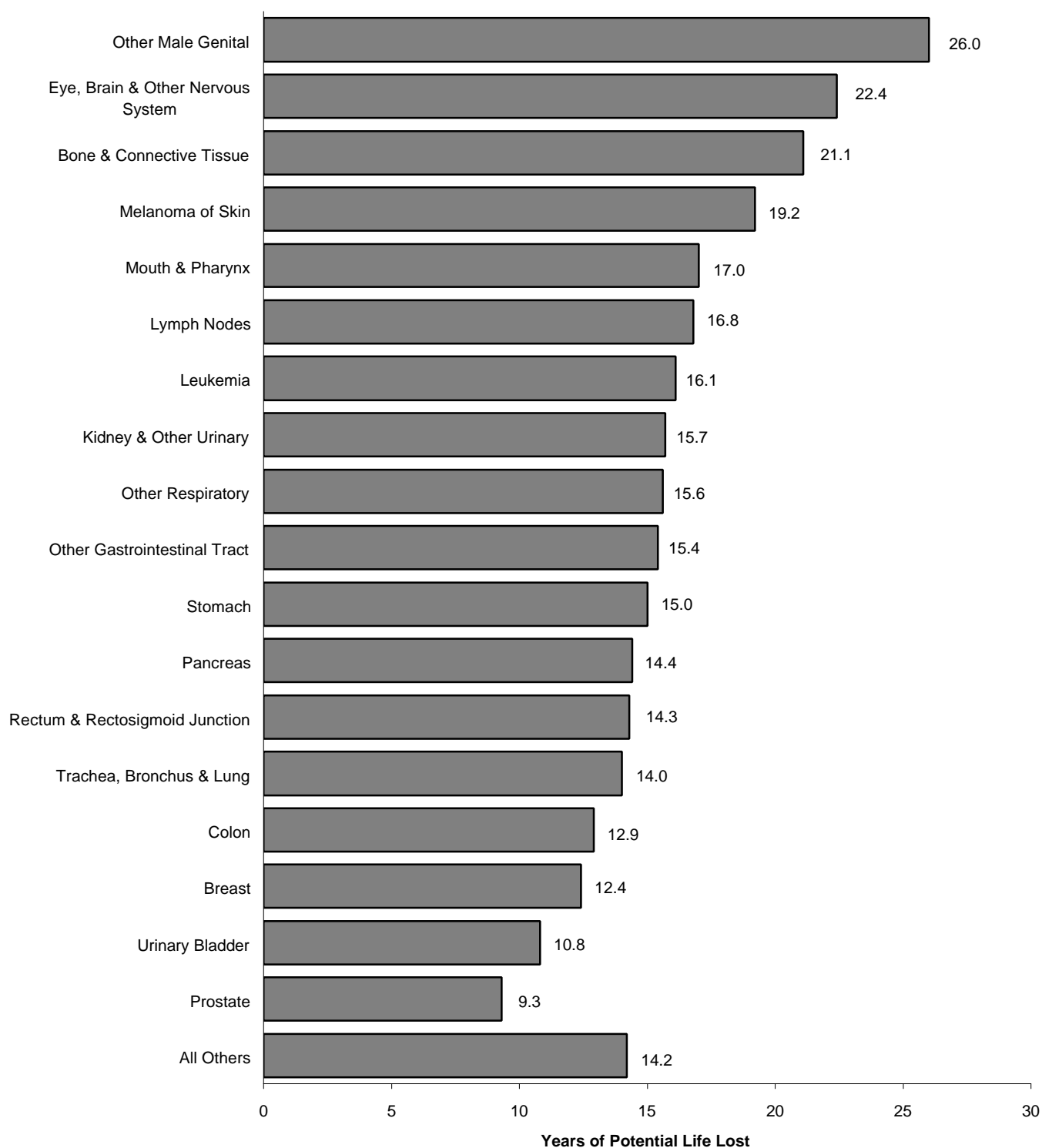


**Figure 6. Number of *Invasive* Cancer Cases and Deaths by Site Group:  
Females, Wisconsin, 1997**



Source: Wisconsin Cancer Reporting System and the 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

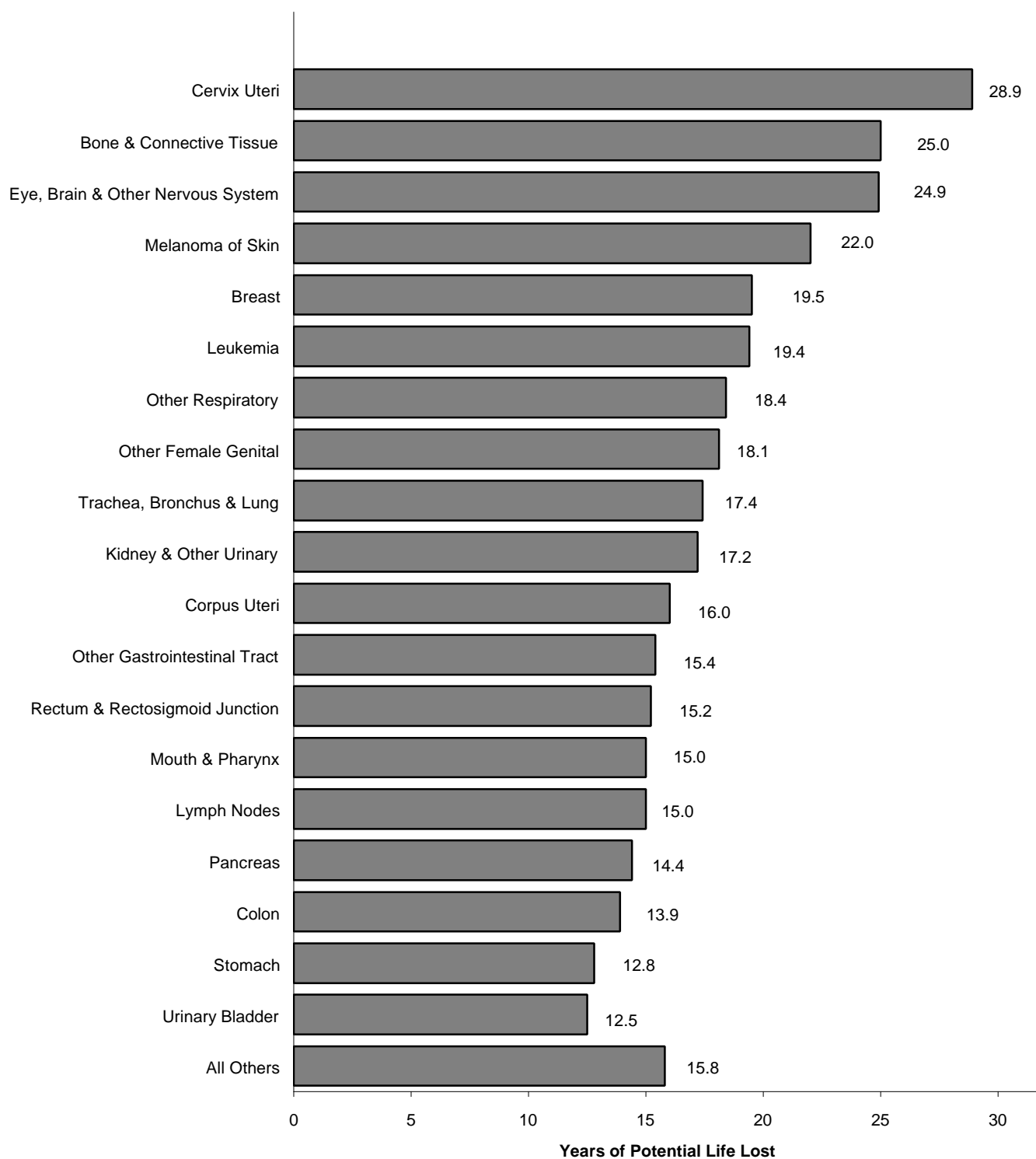
**Figure 7. Average Years of Potential Life Lost Due to Cancer Mortality by Site Group: Males, Wisconsin, 1997**



Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Note: See page 51 for information on calculating the average years of potential life lost.

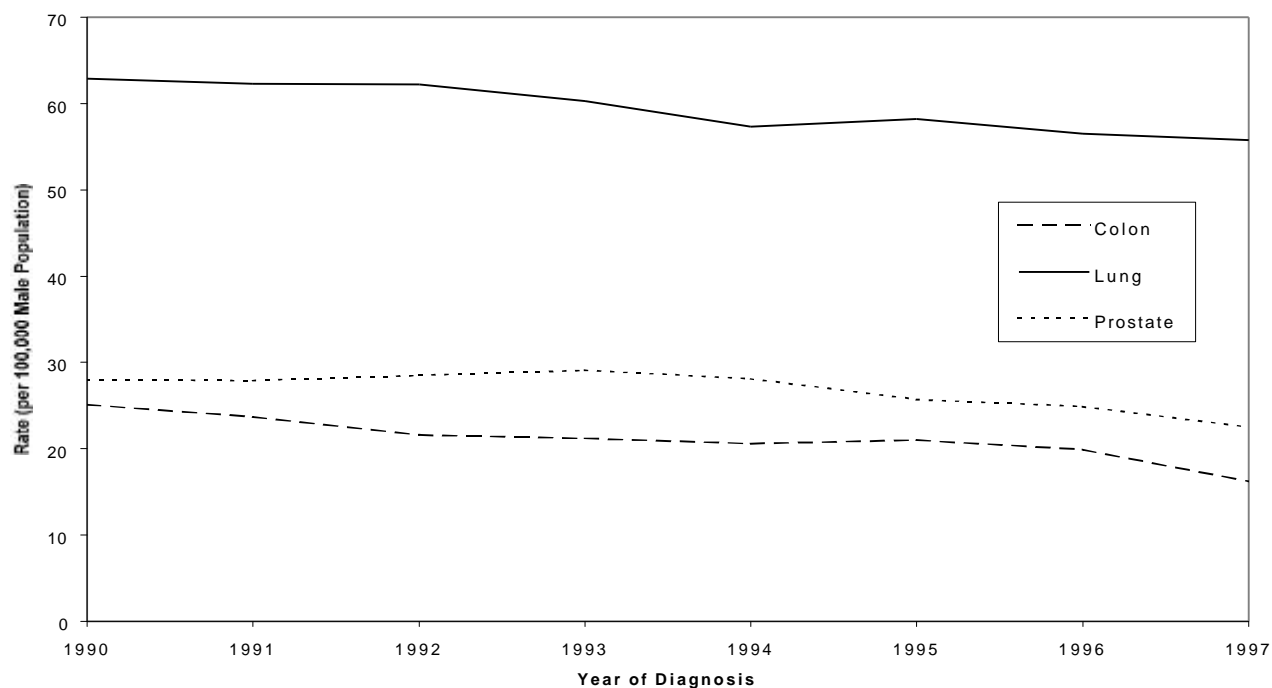
**Figure 8. Average Years of Potential Life Lost Due to Cancer Mortality by Site Group:  
Females, Wisconsin, 1997**



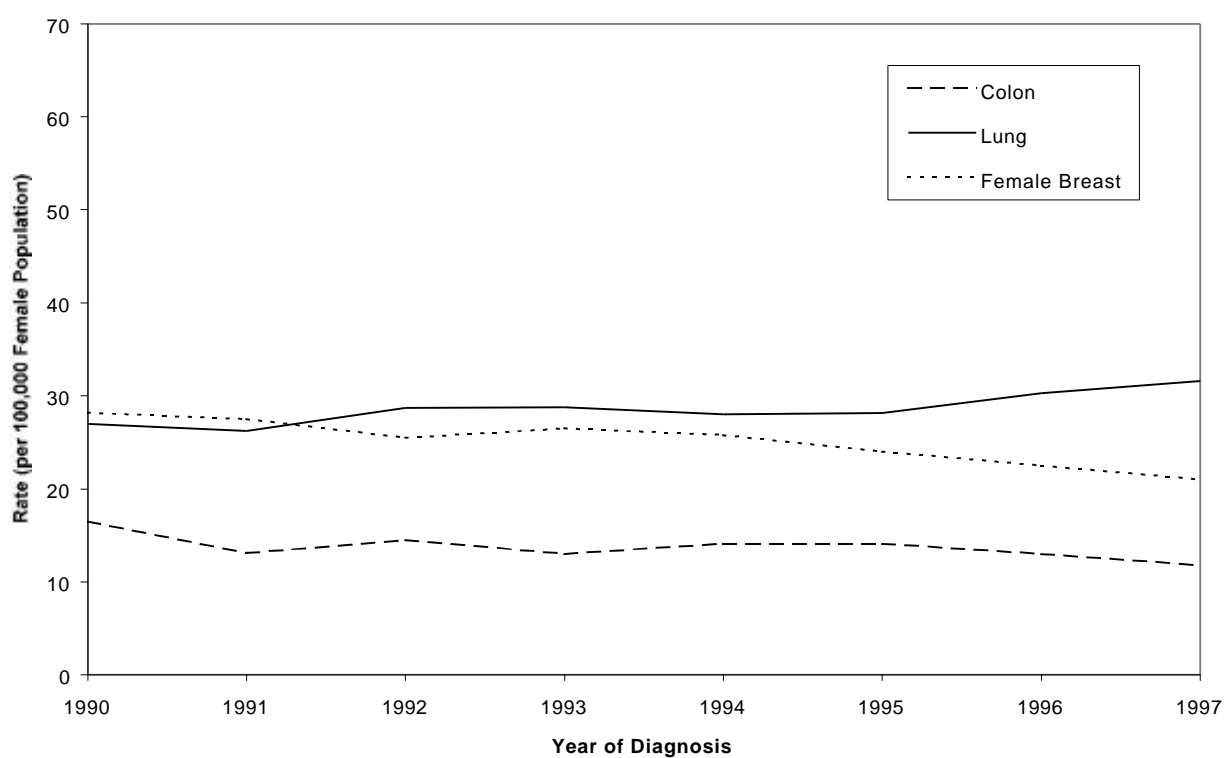
Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Note: See page 51 for information on calculating the average years of potential life lost.

**Figure 9. Age-Adjusted Male Mortality Rates for Selected Cancers, Wisconsin, 1990-1997**



**Figure 10. Age-Adjusted Female Mortality Rates for Selected Cancers, Wisconsin, 1990-1997**



## Technical Notes

### The Cancer Reporting Statute (s. 255.04, Wisconsin Statutes)

- (1) Any hospital, as defined under s. 50.33(2), Wis. Stats., any physician and any laboratory certified under 42 USC 263a shall report information concerning any person diagnosed as having cancer or a precancerous condition to the department as prescribed by the department under sub. (2).
- (2) The department shall prescribe:
  - (a) The form on which the report under sub. (1) shall be submitted.
  - (b) The time schedule under which the report under sub. (1) shall be submitted.
  - (c) The types of cancer and precancerous conditions to be reported under sub. (1).
- (3) Any information reported to the department under sub. (1) or (5) which could identify any individual who is the subject of the report or the physician submitting the report shall be confidential and may not be disclosed by the department except to the following:
  - (a) A central tumor registry in another state if the individual who is the subject of the information resides in the other state.
  - (b) A national tumor registry recognized by the department.
- (4) The report of information under sub. (1) may not be construed as a violation of any person's responsibility for maintaining the confidentiality of patient health care records, as defined under s. 146.81(4).
- (5) The department may, to the extent feasible, collect information related to the occupation of cancer patients in order to fulfill the purpose of s. 250.04 (3)(b)4.

### Administrative Rules: Hospital Cancer Reporting (HSS 124.05 (h))

Every hospital shall report to the department all malignant neoplasms that are diagnosed by the hospital and all malignant neoplasms diagnosed elsewhere if the individual is subsequently admitted to the hospital. The report of each malignant neoplasm shall be made on a form prescribed or approved by the department and shall be submitted to the department within 6 months after the diagnosis is made or within 6 months after the individual's first admission to the hospital if the neoplasm is diagnosed elsewhere, as appropriate. In this paragraph, "malignant neoplasm" means an *in situ* or invasive tumor of the human body, but does not include a squamous cell carcinoma or basal cell carcinoma arising in the skin.

(See page 47 for more information regarding WCRS confidentiality protection measures.)

## **Neoplasm Record/Report: Required Data for 1997 Diagnoses**

### ***Patient Demographics***

Last Name	Zip Code
First Name	County of Residence
Middle Name	Race
Maiden Name	Ethnicity
Sex	Occupation/Industry (text)
Street Address	Date of Birth
City	Marital Status
State	Social Security Number

### ***Administrative Fields***

Medical Record Number	Facility Referred From
Tumor Registry Accession Number (if applicable)	Facility Referred To
CRS Facility Code	Class of Case
Follow-up Physician Number	

### ***Tumor Characteristics***

Sequence Number	Cell Type
Date of First Contact	Grade
Date of Discharge	Tumor Size
Date of Diagnosis	Metastatic Sites (to date)
Primary Site/Subsite	Stage of Disease (at diagnosis)
Laterality	Diagnostic Confirmation

### ***Treatment Fields***

Cancer Directed Treatment  
Non-Definitive Treatment  
Treatment Date

Note: The above data are required on each case submitted to the Cancer Reporting System. Data can be submitted by filling out the Neoplasm/Record report form provided by WCRS or by submitting electronic data using a WCRS-approved record layout format.

### Cancer Reporting System Operating Procedures

**Data Collection.** The Wisconsin Cancer Reporting System receives hospital information from medical records departments or tumor registries. Each records department or registry has two major responsibilities in the flow of information. The first is case finding. All of the hospital's newly diagnosed and/or admitted cancer cases need to be identified. As part of this identification, medical records as well as radiology, pathology, outpatient clinic and autopsy reports need to be examined to assure complete reporting. The second responsibility of the registry or records department is to report the cases identified from one or more of the above-mentioned processes to WCRS. Reporting is done either by completing the one-page Neoplasm Report Form, or by submitting electronic diskettes using a pre-approved record layout.

Physicians and freestanding clinics report (1) all cancer cases they treat, and (2) those cases they diagnose if they are not referred to a Wisconsin hospital for treatment within two months of the diagnosis date. There were 1,216 clinic-only reported cases in 1997, nearly five percent of the total cases reported for that year.

Reports for Wisconsin residents receiving care in Arkansas, California, Colorado, Florida, Illinois, Indiana, Iowa, Kentucky, Massachusetts, Michigan, Mississippi, Missouri, Montana, Texas, Washington, West Virginia and Wyoming are reported to WCRS by the central registries for those states. Minnesota hospitals with substantial numbers of Wisconsin resident cancer patients report Wisconsin cases directly to WCRS. Data supplied by Minnesota facilities and reports from other out-of-state registries accounted for just over two percent of the cases in this report (624 cases).

Finally, WCRS matches its records to the Wisconsin resident annual death file to add mortality information for persons who have previously been reported to WCRS. From that match, WCRS identifies cases where cancer is indicated on the death certificate but no report exists in the registry. For those cases, WCRS queries the medical source listed on the death certificate (the hospital, out-of-state registry, physician or coroner who certified the death) to provide information about the cancer case that was not previously reported to WCRS. **Wisconsin Cancer Incidence and Mortality, 1997** includes 143 cases originally diagnosed during 1997 that were reported as a direct result of the death certificate confirmation process.

**Supplemental Data Sources.** Mortality data were obtained from the 1997 Wisconsin resident death file. The mortality tables are based on deaths that occurred in 1997 for which the underlying cause of death was a reportable cancer. Certificates for out-of-state deaths of Wisconsin residents were provided by the states where the deaths occurred. Months between diagnosis and death were calculated from the date of death shown on the death certificate and the date of diagnosis from the case reports.

Wisconsin population estimates were produced by the Bureau of Health Information. BHI compiles its estimates by reconciling those from the Wisconsin Department of Administration, Demographic Services, against the mid-year age and sex proportional distribution from the Population Estimates Branch of the U.S. Bureau of the Census to produce mid-year, county-level and state-level age-by-sex estimates.

**Reportable Cases.** All primary malignant neoplasms are reportable except basal cell and squamous cell carcinoma of the skin. Benign tumors, premalignant conditions and diseases secondary to the neoplastic process are not reportable.

The 1997 incidence tables are based on Wisconsin resident cases of reportable cancer first diagnosed during 1997 and reported to the Cancer Reporting System by June 15, 1999.

**Record Confidentiality.** In addition to protecting data release as required by the Cancer Reporting Statute (see page 44), once data are received, WCRS follows strict guidelines to maintain the confidentiality of patient records, in-house. Procedures include, but are not limited to, securely storing all records on the Department computer network; limiting computer access of confidential data items to only the WCRS staff; shielding computer screens from non-WCRS staff; and locking up all paper records, diskettes and paper or electronic output that include confidential data items. More detailed information regarding confidentiality may be obtained by contacting WCRS.

**Quality Assurance.** WCRS staff routinely edit cancer reports for completeness and logical consistency, and make periodic checks for consistency among multiple reports received for the same case. If an inconsistency is found, queries are sent to the reporting agent and corrections are made in the records. If there is more than one report is on file for the same person or tumor, the records are matched using national case-merging protocol. This protocol allows for the most accurate and complete information on the description of the tumor cell type, extent of disease at diagnosis, method of diagnostic confirmation, types of definitive therapy, race of patient, etc.

**Completeness and Timeliness of Reports.** The 1997 data are estimated to be 95 percent complete. Statewide training sessions offered by WCRS to the reporting facilities focus on increasing complete casefinding, timely reporting, and compliance with the cancer reporting statute and administrative rule.

WCRS submitted 1996 incidence data to the North American Association of Central Cancer Registries (NAACCR) in late 1998 to be tested on timeliness and data quality (per federal standards). WCRS was given the NAACCR Gold Standard for quality, completeness and timeliness of our 1996 data. This was the second year that NAACCR recognized central registries for achieving these standards (WCRS also received the Gold Standard for its 1995 data). WCRS will submit 1997 data to NAACCR following publication of this report.

**Cancer Case Finding and Data Collection Project.** As part of WCRS's cooperative agreement with the Centers for Disease Control and Prevention, WCRS conducted a casefinding and abstracting project to improve the timeliness of case reporting by collecting unique cases from facilities that were behind in reporting. CDC provided the funding for this project. There was no cost to the participating facilities. Cases not previously reported to WCRS and diagnosed in 1997 or earlier for Wisconsin residents were eligible for this project. A Wisconsin-owned cancer registry casefinding and abstracting service (contracted by WCRS through the state's Request for Bid process) provided the on-site data collection. The project targeted all cancer sites for collection.

The participating facilities were located throughout the state: one in the Northern DHFS region, two in the Southern region, five in the Northeastern region, and six each in the Southeastern and Western regions. WCRS worked with each facility to pre-identify eligible cases for the project by matching the



facility's Medical Records Disease Index and/or pathology reports against the registry. Cases on the facility reports that were not in the WCRS registry were marked for collection. Just over 3,000 cases were collected.

**Multiple Tumor Determination.** When apparent multiple neoplasms of the same primary site in one patient exist simultaneously or over a period of time, WCRS applies the following rules to determine whether more than one independent primary tumor exists:

- 1) A single lesion with multiple histologic types is considered a single primary.
- 2) An independent primary cancer of the same histologic type as one diagnosed in the same site more than one year earlier is considered a separate primary cancer, unless the physician states that it is a recurrence of the earlier cancer.
- 3) Simultaneous multiple lesions of the same histologic type within the same primary site are considered a single primary cancer.
- 4) Multiple lesions of different histologic types within a single site, whether occurring simultaneously or at different times, are considered separate primaries.
- 5) Each side of a paired organ is considered a separate site with the following three exceptions: simultaneous ovarian tumors, simultaneous Wilm's tumors (of the kidney) and simultaneous retinoblastomas (of the eye). These exceptions are coded as a tumor of the paired organ with bilateral presentation (involvement of the tumor in both sides of a paired organ). Aside from the above exceptions, lesions in both sides of a paired organ are considered separate tumors whether occurring simultaneously or at different times unless a physician determines a) one side is metastatic from the other or b) the tumor is presenting bilaterally.

Incident tumors are classified according to the **International Classification of Diseases for Oncology, Second Edition** (ICD-O2). For code groupings used in the tables, see "Coding of Reported Cases: ICD-O2 Site Codes" and "Coding of Reported Cases: ICD-O Cell Type Codes" on pages 53-36. Tumor codes in the mortality section are classified using the **International Classification of Diseases, 1975 Revision** (ICD-9). Throughout this report, site groupings are listed in ICD-9 sequence. Specific ICD-9 codes for the respective site groups are listed on page 57.

While the ICD-O-2 is used to assign both a primary site code *and* a cell type code to every tumor, ICD-9 codes reflect either site *or* cell type. The ICD-9 has two skin tumor classifications, one for melanomas of the skin and one for all other skin tumors combined. Basal cell and squamous cell carcinoma of the skin, which are not reportable to the Cancer Reporting System, make up the majority of these "other" skin tumors. Since the ICD-9 classification does not allow for a distinction between basal cell and squamous cell skin cancers on one hand, and other nonmelanoma skin cancers on the other, only melanomas are included in the mortality section. Reportable nonmelanoma skin cancers are included in the incidence tables in the site group "All Others." In 1997, 86 reportable cases of nonmelanoma skin cancer were diagnosed.

## Definitions

**Patient Residence.** Tables 5 and 6 and Supplemental Tables A and B are based on patient residence at the time of diagnosis. The Cancer Reporting System collects postal zip code and county of residence for cancer cases rather than minor civil division of residence (village, town or city). For Supplemental Table B, zip codes and county boundaries are used to approximate city of residence. Information about the boundaries used to define city of residence is available upon request. Tables 15 and 16 and Supplemental Table C are based on the deceased's county of residence at the time of death.

**Patient Race.** Tables 3, 4, 8, 13, 14 and 18 present cancer information by race. The race categories used in this report are 1) white, 2) African American 3) Other and 4) unknown. The "other" race category combines Native American/Alaskan Native and Asian/Pacific Islander. The specific race categories are as follows:

White	Tahitian
African American	Samoan
American Indian, Aleutian, or Eskimo	Tongan
Chinese	Melanesian, NOS
Japanese	Fiji Islander
Filipino	New Guinean
Hawaiian	Other Asian, including Asian, NOS
Korean	and Oriental, NOS
Asian Indian, Pakistani	Pacific Islander, NOS
Vietnamese	Other
Hmong	Unknown
Kampuchean	
Thai	
Micronesian, NOS	
Chamorroan	
Guamanian, NOS	
Polynesian, NOS	

**Stage of Disease at Diagnosis.** The stage of disease at diagnosis refers to how far a cancer had spread from the site of origin when it was diagnosed. WCRS cancer data are coded according to summary guidelines of NCI's Surveillance Epidemiology and End Results (SEER) program. The following staging definitions are used in this report:

<i>In Situ</i>	A small cancer confined to the cells in which the cancer began, that does not invade or penetrate the surrounding tissue.
<i>Localized</i>	An invasive tumor (penetrated the surrounding tissue) that is confined to the organ of origin.
<i>Regional</i>	A tumor that has spread beyond the organ of origin to adjacent organs or tissue by direct extension (penetrated directly into surrounding organs or tissues), or through the regional

lymph nodes (through the lymphatic system), or both, but appears to have spread no further.

*Distant* A tumor that has spread to parts of the body remote from the primary organ, or a systemic malignancy (such as cancers in the blood, bone marrow, or lymph system).

*Unknown* Insufficient information available to determine the stage of disease at diagnosis.

### Type of Diagnostic Confirmation

The type of diagnostic confirmation reported indicates the method used to provide the most accurate evidence for the diagnosis of cancer. Microscopic confirmation is required to identify cell type, the most sensitive measure of the *type* of cancer. The following definitions and examples are used in coding diagnostic confirmation.

*Positive Histology* - Microscopic diagnosis based upon specimen from a biopsy or frozen section of tissue.

*Positive Cytology or Blood Confirmation* - Diagnosis based upon microscopic examination of cells (as opposed to tissue).

*Positive Microscopic Confirmation, Not Otherwise Specified* - Microscopic diagnosis with the method unspecified.

*Laboratory Test/Marker Study* - Clinical diagnosis based on a laboratory test or a tumor marker study.

*Surgery Observation Without Microscopic Confirmation* - Diagnosis made on the basis of visualization or palpation during surgery.

*Imaging* - Includes chest x-rays, bone scans, mammograms, MRIs, upper GI series, etc.

*Other Clinical Methods* - Diagnosis based on medical history, physical examination and other clinical methods not mentioned above.

*Autopsy* - Reported when the cancer is first discovered or confirmed upon autopsy. An autopsy may involve microscopic examination of tissues or cells.

***Incidence/Death Case Matching (Tables 19 & 20).*** Tables 19 and 20 are derived from incidence records in the WCRS registry (with tumors diagnosed since 1978) matched against the 1997 Wisconsin resident death file and updated with information from the death certificate. The most important matching criteria are full name, date of birth and social security number. If any of the matched persons had more than one primary tumor reported in the WCRS registry (a breast cancer and a cervical cancer, for example), then each tumor is counted as a separate case in the tables. Thus, the sum of all cases in these tables may be more than the total number of cancer deaths for the year.

***Years of Life Lost.*** For an individual cancer patient who dies as a result of cancer, the “years of life lost” is the difference between that individual's age at death and the expected age at death for a person

of the same sex having reached the same age. The average years of life lost by sex and primary site group is the sum, respectively, of years lost by all individuals of each sex who died due to cancer of each primary site, divided by the actual number of deaths for that sex and primary site. The expected age at death for **Cancer Incidence and Mortality, 1997** is calculated from statewide Wisconsin life tables for 1993-95 (prepared by the Bureau of Health Information).

**Rates.** Following national standards set by NCI and CDC, all rates in this report are age-adjusted to the 1970 United States standard population (see page 60). Age-adjusted rates take into account the diverse age distributions between populations. Valid comparisons between age-adjusted rates can be made, provided the same standard population and age groups have been used in the calculation of the rates. The age-adjusted rates for this report were produced using the direct method of adjustment. With this method, the population is first divided into reasonably homogeneous age groups. The age-specific rate is calculated for each age range, and each age-specific rate is weighted by multiplying it by the proportion of the 1970 U. S. standard population in the respective age group. The age-adjusted rate is the sum of the weighted age-specific rates.

The age-adjusted rates in **Cancer Incidence and Mortality, 1997** were calculated using five-year age intervals. Age intervals used to calculate age-adjusted rates for past annual reports have varied, and documentation for each publication should be consulted before comparing published rates.

Though crude rates are not reported in any of the **Cancer Incidence and Mortality, 1997** tables, they can be calculated from the population tables on pages 58 and 59. The reliability of crude rates can be measured by comparing the standard error for each rate. The standard error is estimated by dividing the crude rate by the square root of the number of cases/deaths upon which the rate was based. This gives the standard error for a rate per 100,000 population. The 95% confidence interval can be determined by multiplying the standard error times 1.96.

Age-specific rates can also be calculated using the same tables. The age-specific rates in Figures 1 and 4 are the number of events per 100,000 persons in each sex and five-year age range.

### Caveats/Limitations

**Geographic Boundaries.** Two factors affect interpretation of geographic location tabulations. First, many counties have a very small number of new cancer diagnoses or deaths in a year, resulting in site-specific frequencies in the single digits. Such small numbers may easily double or triple (or decrease by equivalent amounts) from year to year. When groups of related counties or primary sites are combined, the frequencies and rates become more stable. Even at the statewide level, however, some random fluctuation is expected.

Second, reporting completeness and/or timeliness may vary by region. The largest reporting variations relate to out-of-state diagnosis and treatment of patients who live in the sparsely-populated counties along the Wisconsin/Minnesota border and are seen by Minnesota hospitals. The inclusion of reports from nearby Minnesota hospitals, starting in 1992, reduced this problem. While just under two percent of *all* 1997 Wisconsin resident cases were reported by Minnesota facilities, the effect in the border counties may be quite large. The contribution of Minnesota reports to county incidence is as follows :

Douglas (86%), Pierce (45%), Washburn (41%), St. Croix (38%), Polk (35%), Bayfield (34%), Sawyer (33%), Iron (29%), Burnett (28%), Ashland (25%), Buffalo (24%), Pepin (16%) and Barron (4%). Also, a lag in reporting by an individual hospital can result in local under-reporting of cases, but the effect on regional totals is usually minimal.

**Patient Race.** Reporting of racial data is nearly complete on death certificates. Historically, differences among facilities in recording patient race (information not required in medical chart, entered by proxy, patient self-reporting) have led to a number of ambiguous or unknown race codes. As training and expanded codes have been introduced in recent years, the number of incidence cases reported with unknown race has decreased more than three-fold, from 518 in 1994 (over 2 percent of total reports) to 148 in 1997 (less than 1 percent of total reports).

**Years of Life Lost.** Life tables used to calculate potential average years of life lost for past **Cancer in Wisconsin** reports have varied, and documentation for each publication should be consulted before comparing data between years. Sites with a smaller number of cases or deaths can have larger fluctuations in the average years of life lost due to outliers.

**In Situ Cervical Cancer Data.** Comparison of *in situ* cervical cancer data over a wide range of years may be affected by changes in cytologic and pathologic classifications of pre-invasive cervical cancers. In particular, classification systems formerly distinguished between noninvasive malignant lesions and noninvasive pre-malignant or benign lesions; more recent classification systems combine these categories. Data are affected by the use of terminology by cytologists and pathologists. In addition, many local and national cancer programs no longer require reporting of *in situ* cervical cancers. Even though it is still technically reportable in Wisconsin, the elimination of this reporting requirement in other programs has resulted in a parallel reduction in the number of these cases reported to WCRS. These cervical cancer reporting changes have not affected reporting of *in situ* cancers of other sites.

**Case coverage.** The increase in reporting sources in recent years affects the comparability between 1997 data and data for previous years reported in earlier publications.

**DHFS Regions.** As of July 1, 1996, new Department of Health and Family Services Regions were established (see map on page 61). Comparisons with regional data in publications prior to the 1994 report may be affected.

CODING OF REPORTED CASES  
ICD-O-2 Site Codes (1990 Code Version)

Page 1 of 3

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PRIMARY SITE NAME	Major Site Group	Site Group	Individual Site
Lip .....			C00
Tongue .....			C01 - C02
Major Salivary Glands .....			C07 - C08
Gum .....			C03
Floor of Mouth .....			C04
Other & Unspecified Parts of Mouth .....			C05 - C06
Oropharynx .....			C09 - C10
Nasopharynx .....			C11
Hypopharynx .....			C12 - C13
Other Sites in Lip, Oral Cavity, & Pharynx .....			C14
Mouth and Pharynx .....	.. C00 - C14		
Esophagus .....			C15
Stomach .....		C16 .....	C16
Small Intestine .....			C17
Colon .....		C18 .....	C18
Rectum, Rectosigmoid Junction, & Anus .....		C19 - C21 .....	C19 - C21
Colorectal .....	.. C18 - C21		
Liver & Intrahepatic Bile Ducts .....			C22
Gallbladder & Extrahepatic Bile Ducts .....			C23 - C24
Pancreas .....		C25 .....	C25
Retroperitoneum & Peritoneum .....			C48
Other Within Digestive Organs & Peritoneum .....			C26
Other Gastrointestinal Tract .....		C15, C17, C22 - C24	
.....		C26, C48	
Other Gastrointestinal Tract .....	.. C15 - C17		
.....	C22 - C26, C48		
Nasal Cavities & Sinuses, Internal Ear .....			C30 - C31
Larynx .....			C32
Trachea, Bronchus, & Lung .....	.. C33 - C34 .....	C33 - C34	
Pleura .....			C38*
Thymus, Heart, & Mediastinum .....			C37 - C38*
Other Respiratory & Intrathoracic Sites .....			C39
Other Respiratory ..		C30 - C32	
.....		C37 - C39	
Respiratory .....	.. C30 - C39		

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\*Pleura sites are coded C38.4; heart and mediastinum sites are identified by the other C38.x codes

CODING OF REPORTED CASES  
ICD-O-2 Site Codes (1990 Code Version)

Page 2 of 3

PRIMARY SITE NAME	Major Site Group	Site Group	Individual Site
Hematopoietic & Reticuloendothelial Systems, Except Leukemia			C42
Bone, Joints, & Articular Cartilage			C40 - C41
Connective, Subcutaneous, Other Soft Tissue			C49
Bone & Connective Tissue		C40 - C41	
			C49
Melanoma of Skin			Site code C44 if also Cell Type Code 872 - 879
Breast	C50	C50	C50
Uterus, NOS			C55
Cervix Uteri		C53	C53
Placenta			C58
Corpus Uteri		C54	C54
Ovary, Fallopian Tube, & Broad Ligament			C56 - C57*
Other & Unspecified Female Genital Organs			C51 - C52, C57*
Other Female Genital		C51 - C52	
		C55 - C58	
Female Genital		C51 - C58	
Prostate		C61	C61
Testis			C62
Penis & Other Male Genital Organs			C60, C63
Other Male Genital			C60, C62 - C63
Male Genital		C60 - C63	
Urinary Bladder		C67	C67
Kidney & Other Urinary Organs		C64 - C66, C68	C64 - C66, C68
Urinary Tract		C64 - C68	
Eye & Lacrimal Gland			C69
Brain			C71
Other & Unspecified Parts of Central Nervous System			C70, C72
Eye, Brain & Other Central Nervous System		C69 - C72	
Thyroid Gland			C73
Other Endocrine Glands			C74 - C75

\*Broad ligament and ovary sites are coded C57.0 and C57.1, respectively; "other and unspecified female genital" sites are the remaining C57.x codes

CODING OF REPORTED CASES  
ICD-O-2 Site Codes (1990 Code Version)

Page 3 of 3

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PRIMARY SITE NAME	Major Site Group	Site Group	Individual Site
Lymph Nodes.....		C77	C77, Except Cell Type Code 965 - 966
Hodgkin's Disease.....			Cell Type Code 965 - 966
Lymphoid Leukemia.....			Cell Type Code 982
Myeloid Leukemia .....			Cell Type Code 986
Other Leukemia.....			Cell Type Code 980, 981 983 - 985, 987 - 994
Leukemia.....			Cell Type Code 980 - 994
Leukemia & Lymph Nodes...			Cell Type Code 980 - 994 plus Site Code C77
Other & Ill-defined Sites (Includes Reportable Nonmelanoma Skin Sites)			C44, C47, C76
All Other (Includes Reportable Nonmelanoma Skin Sites, Endocrine, Nonleukemic Hematopoietic & Reticuloendothelial Sites , Peripheral Autonomic Nerves and Ill-Defined and Unknown Sites)			C42, C44, C47 C73 - C76 C80
All Others (Includes Mouth & Pharynx, Reportable Nonmelanoma, Skin Sites, Endocrine, , Nonleukemic Hematopoietic, & Reticuloendothelial Sites, Peripheral Autonomic Nerves, Eye, Brain and Central Nervous System Sites and Ill-Defined and Unknown Sites)			C00 - C14 C40 - C44, C47 C49, C69 - C76 C80
Unknown Primary Site .....			C80

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Note: Basal and squamous cell carcinoma of skin sites and nonmalignant neoplasms are not reportable. Extra-nodal lymphomas are coded to their respective primary sites rather than to lymph nodes.



CODING OF REPORTED CASES  
ICD-O Cell Type Codes (Encompasses 1976 and 1990 Code Versions)

CELL TYPE GROUP	CODE
Small Cell/Oat Cell Carcinoma .....	804
Squamous Cell Carcinoma .....	807
Transitional Cell Carcinoma .....	812
Papillary Transitional Cell Carcinoma .....	813
Papillary Adenocarcinoma.....	826
Clear, Renal & Granular Cell Adenocarcinoma .....	831-832
Cystadenocarcinoma.....	844-847
Mucinous Adenocarcinoma .....	848
Ductal Adenocarcinoma .....	850
Medullary Adenocarcinoma.....	851
Lobular Adenocarcinoma.....	852
Other Specified Adenocarcinoma.....	815-820, 823-825 827-830, 833-838 840-842, 855
Other Adenocarcinoma.....	849, 853, 854
Adenocarcinoma, NOS .....	814, 821, 822
Carcinoma, Not Otherwise Specified (NOS).....	801-802
Sarcoma, NOS and Osteogenic Sarcoma.....	880, 918, 919
Astrocytoma, NOS .....	940
Glioblastoma Multiforme .....	944
Germ Cell Neoplasms .....	906-909
Hodgkin's Disease.....	965-966
Non-Hodgkin's Lymphoma .....	959-964, 967-970, 975
Lymphoid Leukemia.....	982
Myeloid Leukemia .....	986
Other Leukemia .....	980-981, 983-985 987-994
Plasma Cell Tumors .....	973
Unknown Cell Type .....	800, 999 (Includes "No Microscopic Confirmation")
All Others .....	803, 805, 808-811 839, 843, 856-879 881-905, 910-917 922-939, 941-943 945-958, 972, 974, 976

CODING OF DEATHS  
ICD-9 Cancer Codes

PRIMARY SITE NAME	Major Site Group	Site Group
Mouth and Pharynx .....		140 - 149
Stomach .....	151	
Colon .....		153
Rectum, Rectosigmoid Junction, & Anus .....		154
Colorectal .....	153, 154	
Pancreas .....	157	
Other Gastro-intestinal Tract .....	150, 152, 155	
.....		156, 158, 159
Other Gastro-intestinal Tract .....	150 - 152	
.....	155 - 159	
Trachea, Bronchus & Lung... ..	162	
Other Respiratory .. ..	160 - 161	
.....		163 - 165
Respiratory .....	160 - 165	
Bone & Connective Tissue... ..	170, 171	
Melanoma of Skin . .....	172	
Breast .....	174 - 175	174 - 175
Cervix Uteri.....		180
Body of Uterus .....		182
Other Female Genital.....		179, 181
.....		183, 184
Female Genital.....	179 - 184	
Prostate .....		185
Other Male Genital .....		186 - 187
Male Genital.....	185 - 187	
Urinary Bladder ....		188
Kidney, Other, & Unspecified Urinary Organs.....		189
Urinary Tract .....	188 - 189	
Eye, Brain & Other Nervous System.....		190 - 192
Lymphoma.....		200 - 202
Leukemia.....		204 - 208
Lymphoma & Leukemia.....	200 - 202	
.....	204 - 208	
All Others .....		193 - 195, 199, 203
All Others .....	140 - 149, 170 - 172	
.....	190 - 195, 199, 203	

WISCONSIN POPULATION ESTIMATES BY 5-YEAR AGE GROUP AND SEX  
July 1, 1997

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Age	Male	Female	Total
ALL AGES	2,567,823	2,648,558	5,216,381
UNDER 5	173,225	165,042	338,267
5-9	190,088	181,290	371,378
10-14	206,412	194,670	401,082
15-19	205,849	195,111	400,960
20-24	170,336	164,849	335,185
25-29	172,426	173,147	345,573
30-34	192,883	193,332	386,215
35-39	224,427	219,270	443,697
40-44	213,775	209,376	423,151
45-49	181,424	183,614	365,038
50-54	143,832	146,900	290,732
55-59	111,418	116,274	227,692
60-64	96,300	101,568	197,868
65-69	88,547	100,848	189,395
70-74	75,670	93,161	168,831
75-79	57,931	82,143	140,074
80-84	37,915	64,472	102,387
85+	25,365	63,491	88,856

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Source: Wisconsin Bureau of Health Information

WISCONSIN POPULATION ESTIMATES BY COUNTY AND DHFS REGION  
July 1, 1997

County	Population	County	Population
Adams	17,614	Marinette	42,239
Ashland	16,811	Marquette	13,488
Barron	42,547	Menominee	4,293
Bayfield	14,568	Milwaukee	955,782
Brown	217,338	Monroe	38,585
Buffalo	13,781	Oconto	32,776
Burnett	13,918	Oneida	34,300
Calumet	38,026	Outagamie	154,857
Chippewa	54,450	Ozaukee	79,893
Clark	32,445	Pepin	7,213
Columbia	48,960	Pierce	34,407
Crawford	16,273	Polk	36,893
Dane	405,389	Portage	66,842
Dodge	82,595	Price	16,248
Door	26,413	Racine	187,183
Douglas	42,444	Richland	17,865
Dunn	38,187	Rock	149,635
Eau Claire	90,206	Rusk	15,348
Florence	4,989	St Croix	56,533
Fond du Lac	95,924	Sauk	52,119
Forest	9,173	Sawyer	15,443
Grant	49,646	Shawano	38,669
Green	31,869	Sheboygan	111,129
Green Lake	19,475	Taylor	19,461
Iowa	21,760	Trempealeau	26,210
Iron	6,300	Vernon	26,450
Jackson	18,098	Vilas	19,417
Jefferson	73,177	Walworth	83,622
Juneau	23,329	Washburn	14,712
Kenosha	141,263	Washington	111,634
Kewaunee	19,735	Waukesha	344,977
La Crosse	105,045	Waupaca	49,609
Lafayette	16,172	Waushara	20,757
Langlade	20,532	Winnebago	153,919
Lincoln	28,830	Wood	77,599
Manitowoc	84,178		
Marathon	124,814		
		<b>DHFS Regions</b>	
		Northern Region	475,327
		Northeastern Region	1,122,825
		Southern Region	933,226
		Southeastern Region	1,977,531
		Western Region	707,472
		<b>STATE TOTAL</b>	<b>5,216,381</b>

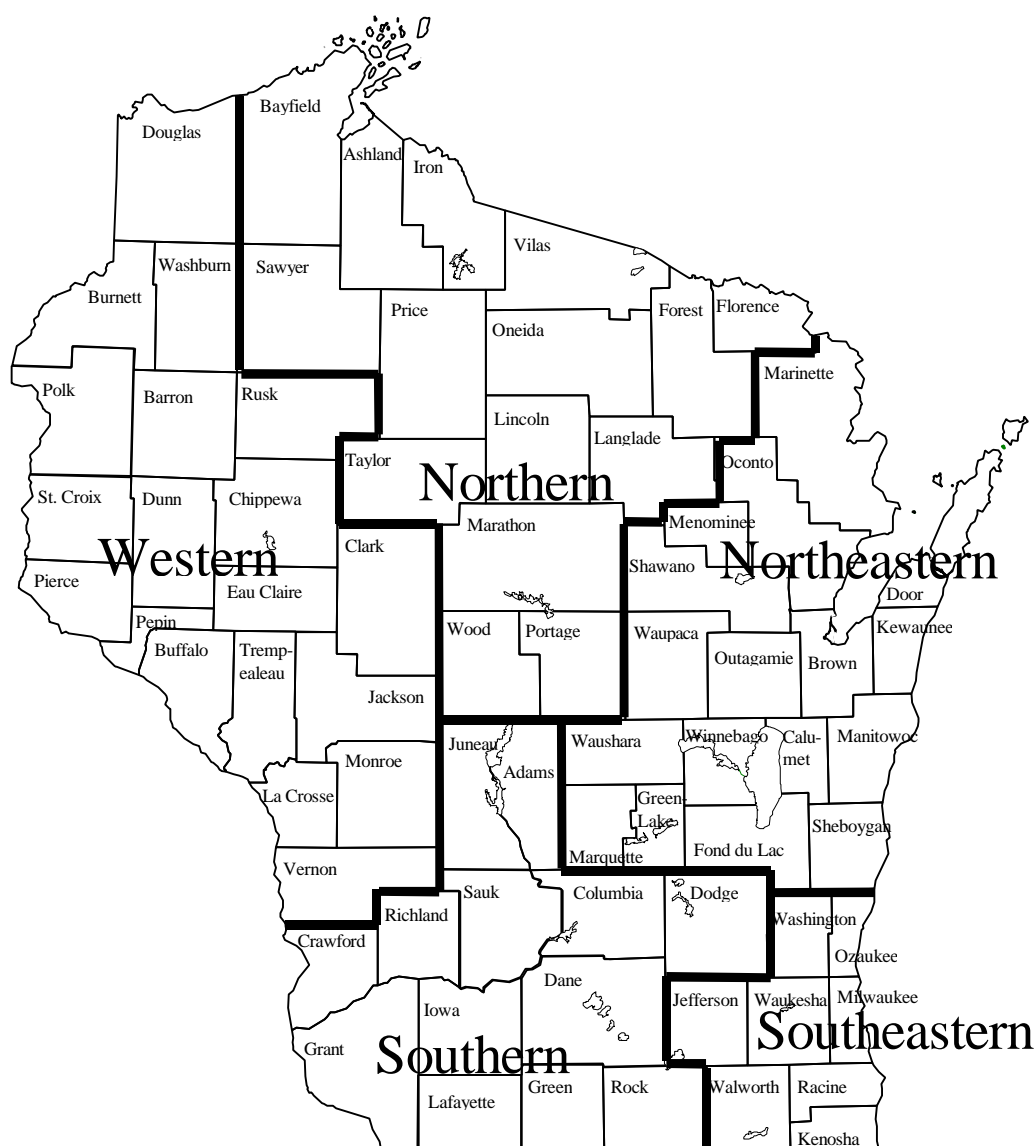
Source: Wisconsin Bureau of Health Information

**1970 U.S. Standard Population**

AGE GROUP	STANDARD POPULATION
0-4	84,416
5-9	98,204
10-14	102,304
15-19	93,845
20-24	80,561
25-29	66,320
30-34	56,249
35-39	54,656
40-44	58,958
45-49	59,622
50-54	54,643
55-59	49,077
60-64	42,403
65-69	34,406
70-74	26,789
75-79	18,871
80-84	11,241
85 and older	7,435

Source: 1970 U.S. Census, Population Estimates Branch, U.S. Bureau of the Census

## Wisconsin Department of Health and Family Services Regions



## Supplemental Tables

**Table A. Number of *In Situ/Invasive* Cancer Cases by Site Group and County of Residence, Wisconsin, 1997**

Primary Site	Total	Adams	Ashland	Barron	Bayfield	Brown	Buffalo	Burnett	Calumet	Chippewa	Clark
Mouth and Pharynx	634	1	1	6	3	19	2	1	4	4	7
Stomach	424	2	2	6	1	9	0	0	3	5	2
Colon	2,448	6	6	16	11	90	8	5	15	38	18
Rectum & Rectosigmoid Junction	895	2	5	3	1	27	1	6	7	18	5
Pancreas	470	0	2	4	2	19	1	4	0	2	1
Other Gastrointestinal Tract	818	8	4	10	5	27	3	3	6	7	6
Trachea, Bronchus & Lung	3,252	16	14	28	16	118	6	15	11	29	21
Other Respiratory	409	1	3	3	0	6	0	1	3	4	5
Bone & Connective Tissue	203	1	1	1	0	6	2	0	1	2	0
Melanoma of Skin	721	2	0	4	3	34	2	2	4	7	7
Breast	4,340	7	10	39	8	196	12	14	17	43	23
Cervix Uteri	702	2	1	2	0	24	0	1	3	2	3
Corpus Uteri	714	2	3	4	5	33	1	2	1	8	10
Other Female Genital	671	2	4	6	2	31	1	2	1	6	3
Prostate	3,827	8	14	44	15	161	14	17	21	36	35
Other Male Genital	209	0	2	1	0	10	0	0	0	4	2
Urinary Bladder	1,230	1	5	12	3	65	4	3	5	14	7
Kidney & Other Urinary	593	1	0	5	3	26	2	1	3	9	5
Eye, Brain & Other Nervous System	495	0	2	5	0	23	2	2	1	4	2
Lymph Nodes	793	0	1	8	1	27	3	2	3	6	6
Leukemia	595	2	3	10	2	21	5	1	2	8	6
All Others	1,163	4	5	11	4	35	1	3	1	11	13
All Reportable Sites	25,606	68	88	228	85	1,007	70	85	112	267	187

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Note: See Technical Notes on pages 53-55 for the individual sites in each site group.

(Table continued on next page)

## Supplemental Tables

**Table A. Number of *In Situ/Invasive Combined* Cancer Cases by Site Group and County of Residence, Wisconsin, 1997 (Continued)**

Primary Site	Columbia	Crawford	Dane	Dodge	Door	Douglas	Dunn	Eau Claire	Florence	Fond du Lac	Forest
Mouth and Pharynx	9	4	35	8	8	9	3	7	0	13	3
Stomach	7	5	20	5	3	4	2	5	0	4	2
Colon	29	7	123	29	12	22	14	39	4	47	3
Rectum & Rectosigmoid Junction	5	5	60	7	9	12	3	12	0	21	5
Pancreas	7	1	31	4	3	3	4	1	0	9	0
Other Gastrointestinal Tract	12	5	27	13	2	5	3	14	0	14	3
Trachea, Bronchus & Lung	38	2	182	37	26	49	13	39	1	62	9
Other Respiratory	7	1	16	5	5	4	0	9	0	8	0
Bone & Connective Tissue	2	1	12	1	1	2	0	1	0	4	0
Melanoma of Skin	5	2	70	5	5	1	2	18	1	23	0
Breast	43	13	312	48	23	31	14	57	7	110	8
Cervix Uteri	9	6	58	11	6	3	1	6	1	15	1
Corpus Uteri	6	4	44	10	4	6	9	15	0	19	0
Other Female Genital	7	3	57	4	8	7	2	10	1	14	0
Prostate	42	12	207	51	39	26	16	65	1	79	6
Other Male Genital	0	0	21	2	0	1	0	3	0	2	0
Urinary Bladder	16	3	81	23	19	11	2	21	0	18	0
Kidney & Other Urinary	5	3	34	6	5	4	3	11	0	11	1
Eye, Brain & Other Nervous System	9	0	32	7	2	4	1	5	0	9	3
Lymph Nodes	10	2	58	4	7	3	1	10	1	20	3
Leukemia	4	3	43	3	4	4	2	8	0	12	0
All Others	13	2	80	13	6	13	8	25	0	20	4
All Reportable Sites	285	84	1,603	296	197	224	103	381	27	534	51

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Note: See Technical Notes on pages 53-55 for the individual sites in each site group.

(Table continued on next page)



## Supplemental Tables

**Table A. Number of *In Situ/Invasive Combined* Cancer Cases by Site Group and County of Residence, Wisconsin, 1997 (Continued)**

Primary Site	Grant	Green	Green Lake	Iowa	Iron	Jackson	Jefferson	Juneau	Kenosha	Kewaunee	La Crosse
Mouth and Pharynx	6	8	1	2	1	1	11	4	11	1	12
Stomach	5	4	3	4	0	1	9	1	5	1	3
Colon	33	28	9	7	6	18	46	17	62	17	37
Rectum & Rectosigmoid Junction	11	5	4	3	2	4	12	5	25	3	26
Pancreas	4	1	3	5	1	2	9	1	2	1	9
Other Gastrointestinal Tract	8	1	3	4	0	3	13	5	18	2	12
Trachea, Bronchus & Lung	35	19	17	11	3	9	45	21	76	6	67
Other Respiratory	3	4	0	0	1	1	5	4	10	4	10
Bone & Connective Tissue	3	2	2	0	0	1	2	0	5	2	4
Melanoma of Skin	13	7	2	4	2	1	7	2	5	9	24
Breast	40	40	27	18	6	14	56	17	89	19	87
Cervix Uteri	6	7	0	5	0	6	8	11	11	3	33
Corpus Uteri	11	6	4	2	1	1	11	3	16	2	14
Other Female Genital	9	5	2	3	4	1	10	5	18	4	14
Prostate	45	20	19	15	9	14	37	17	83	25	62
Other Male Genital	1	1	1	1	1	1	2	3	3	2	5
Urinary Bladder	7	8	5	4	3	8	16	10	28	6	15
Kidney & Other Urinary	9	3	0	0	3	3	4	2	17	2	9
Eye, Brain & Other Nervous System	4	2	0	4	1	1	7	5	10	0	7
Lymph Nodes	8	3	5	1	0	3	13	1	20	3	18
Leukemia	5	1	1	2	4	3	8	3	12	4	6
All Others	13	5	6	7	1	5	21	6	22	4	25
All Reportable Sites	279	180	114	102	49	101	352	143	548	120	499

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Note: See Technical Notes on pages 53-55 for the individual sites in each site group.

(Table continued on next page)

## Supplemental Tables

**Table A. Number of *In Situ/Invasive Combined* Cancer Cases by Site Group and County of Residence, Wisconsin, 1997 (Continued)**

Primary Site	Lafayette	Langlade	Lincoln	Manitowoc	Marathon	Marinette	Marquette	Menominee	Milwaukee	Monroe	Oconto
Mouth and Pharynx	1	1	2	9	12	12	4	1	128	7	12
Stomach	0	4	3	9	8	4	0	0	88	1	2
Colon	8	7	15	32	55	37	10	1	450	20	15
Rectum & Rectosigmoid Junction	5	0	11	20	26	7	4	0	162	7	5
Pancreas	3	3	2	5	12	7	4	0	89	5	2
Other Gastrointestinal Tract	1	3	4	23	18	13	2	0	169	8	5
Trachea, Bronchus & Lung	13	11	32	64	61	41	17	4	702	28	16
Other Respiratory	1	2	3	9	8	5	2	0	85	5	0
Bone & Connective Tissue	1	0	4	1	6	3	1	0	38	0	0
Melanoma of Skin	3	2	6	3	9	8	2	0	115	3	4
Breast	9	15	40	86	86	43	16	2	826	32	26
Cervix Uteri	2	1	8	14	11	14	4	1	88	12	7
Corpus Uteri	2	1	5	14	15	12	0	0	132	5	1
Other Female Genital	4	2	5	8	15	7	2	0	109	3	6
Prostate	6	12	32	69	85	48	20	0	718	26	24
Other Male Genital	1	0	0	1	10	0	0	0	39	0	0
Urinary Bladder	3	4	13	29	35	13	5	1	195	6	11
Kidney & Other Urinary	1	4	4	9	10	5	2	0	112	8	6
Eye, Brain & Other Nervous System	4	4	4	8	13	6	2	1	94	4	0
Lymph Nodes	2	4	8	9	21	8	5	0	153	7	9
Leukemia	3	2	4	7	18	7	2	0	110	6	0
All Others	6	6	6	13	18	15	5	0	221	14	5
All Reportable Sites	79	88	209	442	552	315	109	11	4,823	207	156

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Note: See Technical Notes on pages 53-55 for the individual sites in each site group.

(Table continued on next page)

## Supplemental Tables

**Table A. Number of *In Situ/Invasive Combined* Cancer Cases by Site Group and County of Residence, Wisconsin, 1997 (Continued)**

Primary Site	Oneida	Outagamie	Ozaukee	Pepin	Pierce	Polk	Portage	Price	Racine	Richland	Rock
Mouth and Pharynx	8	18	6	0	2	7	4	4	30	1	16
Stomach	4	16	2	0	1	2	11	1	17	5	11
Colon	22	84	33	10	15	9	21	5	71	10	76
Rectum & Rectosigmoid Junction	10	21	7	2	9	7	5	2	24	5	20
Pancreas	5	18	5	1	1	4	6	3	24	3	9
Other Gastrointestinal Tract	6	30	11	0	4	7	17	1	30	3	23
Trachea, Bronchus & Lung	32	93	41	6	9	28	29	7	141	4	124
Other Respiratory	3	16	5	0	1	2	2	2	21	0	13
Bone & Connective Tissue	3	3	9	0	1	1	0	1	11	0	10
Melanoma of Skin	5	26	9	0	2	6	10	0	24	2	22
Breast	29	139	69	7	20	30	48	11	152	7	116
Cervix Uteri	10	17	5	0	2	8	3	5	15	2	55
Corpus Uteri	6	18	10	1	3	3	7	6	23	2	14
Other Female Genital	8	23	5	0	3	8	3	3	26	0	20
Prostate	43	104	71	7	15	23	26	12	176	4	95
Other Male Genital	1	9	3	0	0	0	1	1	6	0	4
Urinary Bladder	10	46	12	4	6	11	21	2	39	5	30
Kidney & Other Urinary	9	31	13	1	1	1	5	4	15	0	8
Eye, Brain & Other Nervous System	3	13	9	0	4	3	8	1	23	3	7
Lymph Nodes	7	25	18	3	2	5	6	4	29	2	22
Leukemia	7	17	7	0	2	3	10	4	19	3	14
All Others	10	34	22	2	2	14	9	2	37	5	45
All Reportable Sites	241	801	372	44	105	182	252	81	953	66	754

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Note: See Technical Notes on pages 53-55 for the individual sites in each site group.

(Table continued on next page)

## Supplemental Tables

**Table A. Number of *In Situ/Invasive Combined* Cancer Cases by Site Group and County of Residence, Wisconsin, 1997 (Continued)**

Primary Site	Rusk	St. Croix	Sauk	Sawyer	Shawano	Sheboygan	Taylor	Trempealeau	Vernon	Vilas	Walworth
Mouth and Pharynx	5	2	6	4	4	16	4	4	4	6	9
Stomach	2	1	6	2	5	14	1	7	4	2	3
Colon	5	10	29	19	24	76	6	14	14	19	39
Rectum & Rectosigmoid Junction	3	5	7	3	8	19	3	8	7	3	17
Pancreas	0	3	4	1	7	17	1	3	4	1	12
Other Gastrointestinal Tract	4	3	13	2	9	13	3	7	2	7	11
Trachea, Bronchus & Lung	5	17	30	15	25	60	11	11	7	22	59
Other Respiratory	2	0	3	3	2	7	0	1	1	7	8
Bone & Connective Tissue	1	1	0	1	1	2	2	2	0	2	2
Melanoma of Skin	2	2	6	1	3	18	4	5	5	7	9
Breast	12	15	32	13	36	108	10	33	25	28	68
Cervix Uteri	0	2	7	0	8	48	1	9	9	7	8
Corpus Uteri	3	2	8	3	4	20	6	3	9	3	9
Other Female Genital	3	3	9	3	9	12	3	3	4	2	17
Prostate	8	12	41	18	35	85	11	23	26	28	38
Other Male Genital	1	3	2	0	4	5	1	1	2	0	5
Urinary Bladder	2	4	17	3	10	24	7	12	8	9	17
Kidney & Other Urinary	1	2	2	3	6	26	2	5	6	7	12
Eye, Brain & Other Nervous System	0	5	4	2	5	11	2	2	3	4	11
Lymph Nodes	0	4	7	4	7	24	1	7	5	3	13
Leukemia	3	1	10	4	5	17	3	2	3	6	9
All Others	3	5	7	2	11	31	3	11	5	8	26
All Reportable Sites	65	102	250	106	228	653	85	173	153	181	402

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Note: See Technical Notes on pages 53-55 for the individual sites in each site group.

(Table continued on next page)

## Supplemental Tables

**Table A. Number of *In Situ/Invasive Combined* Cancer Cases by Site Group and County of Residence, Wisconsin, 1997 (Continued)**

Primary Site	Washburn	Washington	Waukesha	Waupaca	Waushara	Winnebago	Wood
Mouth and Pharynx	2	12	26	8	3	22	7
Stomach	2	10	23	8	0	12	10
Colon	15	56	133	33	13	83	32
Rectum & Rectosigmoid Junction	2	10	69	8	7	25	18
Pancreas	1	4	35	6	2	12	10
Other Gastrointestinal Tract	5	17	41	9	3	29	16
Trachea, Bronchus & Lung	14	37	175	53	15	99	53
Other Respiratory	1	11	29	4	0	17	6
Bone & Connective Tissue	1	4	17	2	1	5	8
Melanoma of Skin	3	10	61	7	2	23	19
Breast	8	102	342	32	21	133	65
Cervix Uteri	0	3	15	4	2	29	21
Corpus Uteri	6	15	48	11	4	16	7
Other Female Genital	2	13	31	8	1	31	11
Prostate	14	66	315	33	18	94	81
Other Male Genital	0	6	19	2	1	9	3
Urinary Bladder	7	16	85	17	8	30	30
Kidney & Other Urinary	2	6	29	9	2	23	11
Eye, Brain & Other Nervous System	1	12	36	2	0	19	8
Lymph Nodes	0	21	56	10	3	20	8
Leukemia	2	8	30	16	5	20	14
All Others	2	19	73	12	7	37	23
All Reportable Sites	90	458	1,688	294	118	788	461

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services.

Note: See Technical Notes on pages 53-55 for the individual sites in each site group.

**Table B. Number of *In Situ/Invasive Combined* Cancer Cases for Large Cities and their Surrounding Counties by Major Site Group, Wisconsin, 1997**

COUNTY Major City	MAJOR SITE GROUP									Total
	Colo- Rectal	Other GI	Respiratory	Breast	Female Genital	Male Genital	Urinary Tract	Leukemia & Lymph Nodes	Other	
BROWN	117	74	124	196	88	171	91	48	98	1,007
Green Bay	90	59	106	155	74	132	80	37	77	810
Rest of County	27	15	18	41	14	39	11	11	21	197
DANE	183	113	198	312	159	228	115	101	194	1,603
Madison	132	77	135	217	112	156	71	65	135	1,100
Rest of County	51	36	63	95	47	72	44	36	59	503
EAU CLAIRE	51	27	48	57	31	68	32	18	49	381
Eau Claire	34	22	38	46	23	58	29	14	39	303
Rest of County	17	5	10	11	8	10	3	4	10	78
KENOSHA	87	36	86	89	45	86	45	32	42	548
Kenosha	77	30	72	74	40	75	38	24	36	466
Rest of County	10	6	14	15	5	11	7	8	6	82
LA CROSSE	63	36	77	87	61	67	24	24	60	499
La Crosse	35	23	50	55	44	36	14	18	38	313
Rest of County	28	13	27	32	17	31	10	6	22	186
MILWAUKEE	612	474	787	826	329	757	307	263	468	4,823
Milwaukee	451	365	595	573	230	561	209	190	343	3,517
Wauwatosa	32	22	38	69	16	36	17	11	26	267
West Allis	47	35	52	68	25	66	28	22	33	376
Rest of County	82	52	102	116	58	94	53	40	66	663
OUTAGAMIE	105	82	109	139	58	113	77	42	76	801
Appleton	52	50	63	80	38	68	42	25	37	455
Rest of County	53	32	46	59	20	45	35	17	39	346
RACINE	95	101	162	152	64	182	54	48	95	953
Racine	67	70	105	96	41	122	35	30	65	631
Rest of County	28	31	57	56	23	60	19	18	30	322
ROCK	96	59	137	116	89	99	38	36	84	754
Janesville	45	23	63	61	44	49	13	12	39	349
Rest of County	51	36	74	55	45	50	25	24	45	405
SHEBOYGAN	95	60	67	108	80	90	50	41	62	653
Sheboygan	53	37	42	66	46	51	30	26	38	389
Rest of County	42	23	25	42	34	39	20	15	24	264
WAUKESHA	202	125	204	342	94	334	114	86	187	1,688
Waukesha	41	42	72	104	33	99	34	36	66	527
Rest of County	161	83	132	238	61	235	80	50	121	1,161
WINNEBAGO	108	75	116	133	76	103	53	40	84	788
Oshkosh	49	48	54	70	44	53	31	19	50	418
Rest of County	59	27	62	63	32	50	22	21	34	370

Source: Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services

Notes: See Technical Notes on pages 53-55 for individual sites included in each major site group, and page 49 for how city residence was determined. In this table, the major site group "Other Gastrointestinal Tract" includes the site group "Mouth and Pharynx." Cities selected for this table are those with an estimated population of at least 50,000.

**Table C. Number of Cancer Deaths by Site Group and County of Residence, Wisconsin, 1997**

Primary Site	Total	Adams	Ashland	Barron	Bayfield	Brown	Buffalo	Burnett	Calumet	Chippewa	Clark
Mouth and Pharynx	149	2	1	0	1	5	2	0	0	3	1
Stomach	228	1	1	2	1	15	0	1	2	1	1
Colon	989	7	5	11	6	30	3	6	7	8	9
Rectum & Rectosigmoid Junction	176	1	1	0	1	6	1	2	3	0	3
Pancreas	528	0	1	5	3	14	1	3	1	7	2
Other Gastrointestinal Tract	652	4	3	4	4	22	0	5	5	4	3
Trachea, Bronchus & Lung	2,683	12	7	22	9	92	6	11	9	24	14
Other Respiratory	94	1	1	1	1	1	0	0	0	0	2
Bone & Connective Tissue	125	1	0	0	0	3	0	1	0	2	1
Melanoma of Skin	131	2	1	3	1	8	1	1	1	1	1
Breast	791	2	1	7	4	37	3	2	8	4	5
Cervix Uteri	72	1	0	0	0	0	0	0	0	1	0
Corpus Uteri	67	0	0	1	0	2	0	1	2	1	0
Other Female Genital	397	0	0	4	3	17	4	0	5	2	1
Prostate	691	4	3	5	5	19	5	3	5	8	9
Other Male Genital	12	0	0	0	0	0	0	0	0	0	0
Urinary Bladder	247	1	1	0	0	13	1	2	2	3	0
Kidney & Other Urinary	257	2	0	3	1	10	1	0	0	7	5
Eye, Brain & Other Nervous System	282	0	0	3	0	14	0	0	0	2	2
Lymph Nodes	551	3	1	7	0	19	1	4	3	9	8
Leukemia	470	1	3	6	1	13	4	2	5	7	2
All Others	940	9	4	7	0	21	4	5	2	5	2
<b>Total Cancer Deaths</b>	<b>10,532</b>	<b>54</b>	<b>34</b>	<b>91</b>	<b>41</b>	<b>361</b>	<b>37</b>	<b>49</b>	<b>60</b>	<b>99</b>	<b>71</b>

Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services.

Note: "Total cancer deaths" include all reportable cancer deaths except deaths from nonmelanoma skin cancer (see Tech. Notes on page 48)

(Table continued on next page)

**Table C. Number of Cancer Deaths by Site Group and County of Residence, Wisconsin, 1997 (Continued)**

Primary Site	Columbia	Crawford	Dane	Dodge	Door	Douglas	Dunn	Eau Claire	Florence	Fond du Lac	Forest
Mouth and Pharynx	3	0	5	2	2	3	0	1	0	3	0
Stomach	1	0	8	3	2	5	0	4	0	2	1
Colon	15	1	47	22	11	14	6	15	0	20	1
Rectum & Rectosigmoid Junction	1	2	2	2	2	4	1	4	0	4	1
Pancreas	5	4	29	5	3	2	7	4	2	5	1
Other Gastrointestinal Tract	5	2	34	12	4	8	4	4	1	12	3
Trachea, Bronchus & Lung	41	8	137	56	16	33	7	26	0	46	10
Other Respiratory	1	0	5	1	0	3	0	1	0	2	1
Bone & Connective Tissue	2	0	11	2	2	3	0	1	0	1	0
Melanoma of Skin	2	0	5	0	0	1	0	3	0	1	0
Breast	8	2	34	14	4	4	3	11	3	20	0
Cervix Uteri	2	0	4	3	0	1	0	0	0	1	0
Corpus Uteri	0	0	3	0	2	0	0	0	1	0	0
Other Female Genital	5	1	31	6	4	4	6	5	0	8	0
Prostate	6	3	30	11	5	8	6	14	0	8	0
Other Male Genital	0	0	2	1	0	0	0	0	0	0	0
Urinary Bladder	1	1	14	7	0	0	3	3	1	3	0
Kidney & Other Urinary	4	1	14	4	3	1	2	2	0	6	0
Eye, Brain & Other Nervous System	1	0	21	6	1	2	3	6	1	4	1
Lymph Nodes	7	0	32	9	5	6	3	7	1	12	0
Leukemia	2	1	41	7	3	2	2	6	0	3	1
All Others	13	3	56	20	9	11	6	18	1	15	1
Total Cancer Deaths	125	29	565	193	78	115	59	135	11	176	21

Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services.

Note: "Total cancer deaths" include all reportable cancer deaths except deaths from nonmelanoma skin cancer (see Tech. Notes on page 48)

(Table continued on next page)



**Table C. Number of Cancer Deaths by Site Group and County of Residence, Wisconsin, 1997 (Continued)**

Primary Site	Grant	Green	Green Lake	Iowa	Iron	Jackson	Jefferson	Juneau	Kenosha	Kewaunee	La Crosse
Mouth and Pharynx	2	0	0	0	1	0	2	0	4	0	1
Stomach	3	1	0	2	1	0	4	0	8	1	3
Colon	8	6	6	2	1	4	19	10	18	4	25
Rectum & Rectosigmoid Junction	1	0	0	0	0	1	1	0	3	1	8
Pancreas	3	1	4	0	2	5	11	4	6	7	6
Other Gastrointestinal Tract	9	7	2	1	5	4	15	6	18	2	12
Trachea, Bronchus & Lung	30	14	11	9	9	9	37	28	72	6	45
Other Respiratory	0	0	1	1	0	0	0	0	1	0	2
Bone & Connective Tissue	1	0	2	1	0	0	1	0	2	1	3
Melanoma of Skin	1	0	0	1	0	0	4	1	3	1	2
Breast	12	5	7	2	4	4	10	10	24	2	13
Cervix Uteri	0	2	0	0	0	1	1	1	3	1	1
Corpus Uteri	2	1	0	0	0	0	1	0	0	0	4
Other Female Genital	7	3	1	2	2	2	6	1	8	1	7
Prostate	8	5	9	3	2	5	7	5	17	2	13
Other Male Genital	0	0	0	0	0	0	0	0	1	0	1
Urinary Bladder	3	5	1	0	1	2	6	2	9	0	4
Kidney & Other Urinary	3	1	2	3	0	1	3	3	3	2	4
Eye, Brain & Other Nervous System	1	0	0	2	1	0	2	1	2	1	8
Lymph Nodes	2	1	2	0	2	1	3	1	12	3	11
Leukemia	2	1	4	1	2	3	7	1	9	2	5
All Others	9	7	3	5	1	1	12	7	23	5	16
Total Cancer Deaths	107	60	55	35	34	43	152	81	246	42	194

Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services.

Note: "Total cancer deaths" include all reportable cancer deaths except deaths from nonmelanoma skin cancer (see Tech. Notes on page 48)

(Table continued on next page)

**Table C. Number of Cancer Deaths by Site Group and County of Residence, Wisconsin, 1997 (Continued)**

Primary Site	Lafayette	Langlade	Lincoln	Manitowoc	Marathon	Marinette	Marquette	Menominee	Milwaukee	Monroe	Oconto
Mouth and Pharynx	0	2	0	1	5	3	0	0	36	1	3
Stomach	0	2	2	4	3	0	0	0	55	0	2
Colon	0	5	7	16	19	14	3	0	170	5	9
Rectum & Rectosigmoid Junction	0	1	3	1	8	1	0	0	29	1	4
Pancreas	6	2	1	7	14	7	5	0	119	5	2
Other Gastrointestinal Tract	2	2	4	6	24	6	2	0	119	7	5
Trachea, Bronchus & Lung	16	9	17	44	45	30	17	7	544	17	19
Other Respiratory	0	1	2	0	2	0	0	0	18	3	0
Bone & Connective Tissue	0	1	1	2	1	2	0	0	29	1	0
Melanoma of Skin	1	1	0	3	4	2	1	0	22	3	1
Breast	2	3	9	13	18	6	2	0	150	6	3
Cervix Uteri	0	0	1	2	0	2	0	0	18	0	0
Corpus Uteri	0	1	0	2	2	0	0	0	20	0	0
Other Female Genital	3	3	3	3	6	3	1	0	81	5	3
Prostate	2	6	5	10	20	6	5	0	113	6	8
Other Male Genital	0	0	0	1	0	0	0	0	2	0	0
Urinary Bladder	3	1	2	3	10	1	1	0	45	1	3
Kidney & Other Urinary	1	1	1	5	4	4	2	0	43	1	0
Eye, Brain & Other Nervous System	2	0	0	5	7	6	0	1	47	2	0
Lymph Nodes	2	2	5	12	8	5	0	1	109	2	1
Leukemia	0	2	2	5	12	4	2	0	86	1	2
All Others	4	3	6	17	10	8	3	1	202	5	3
<b>Total Cancer Deaths</b>	<b>44</b>	<b>48</b>	<b>71</b>	<b>162</b>	<b>222</b>	<b>110</b>	<b>44</b>	<b>10</b>	<b>2,057</b>	<b>72</b>	<b>68</b>

Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services.

Note: "Total cancer deaths" include all reportable cancer deaths except deaths from nonmelanoma skin cancer (see Tech. Notes on page 48)

(Table continued on next page)

**Table C. Number of Cancer Deaths by Site Group and County of Residence, Wisconsin, 1997 (Continued)**

Primary Site	Oneida	Outagamie	Ozaukee	Pepin	Pierce	Polk	Portage	Price	Racine	Richland	Rock
Mouth and Pharynx	1	6	1	0	1	1	1	1	8	0	2
Stomach	4	8	2	1	1	0	3	2	9	0	5
Colon	6	17	13	5	13	7	8	7	28	7	23
Rectum & Rectosigmoid Junction	2	6	2	0	2	0	2	0	12	0	8
Pancreas	3	10	6	1	2	3	6	4	23	2	13
Other Gastrointestinal Tract	5	15	11	1	3	9	7	0	26	4	20
Trachea, Bronchus & Lung	29	78	31	4	9	32	26	9	102	11	101
Other Respiratory	2	4	0	0	4	0	1	1	2	0	2
Bone & Connective Tissue	1	2	2	1	0	1	0	1	3	0	5
Melanoma of Skin	2	5	1	1	0	2	2	2	4	0	5
Breast	7	20	15	0	4	9	10	5	24	1	25
Cervix Uteri	0	0	1	0	0	0	1	1	2	0	2
Corpus Uteri	2	0	0	1	1	0	0	0	4	0	1
Other Female Genital	4	9	11	1	1	2	2	2	8	0	12
Prostate	6	25	12	1	4	5	8	3	21	4	15
Other Male Genital	0	0	0	0	0	0	1	0	0	0	0
Urinary Bladder	1	6	2	0	0	0	2	0	5	1	9
Kidney & Other Urinary	5	4	8	2	0	0	5	1	10	0	6
Eye, Brain & Other Nervous System	3	11	3	0	2	1	3	1	7	5	4
Lymph Nodes	7	17	8	1	4	7	6	3	21	1	19
Leukemia	5	13	9	1	4	4	4	6	16	6	13
All Others	13	28	14	1	3	10	5	5	37	4	27
<b>Total Cancer Deaths</b>	<b>108</b>	<b>284</b>	<b>152</b>	<b>22</b>	<b>58</b>	<b>93</b>	<b>103</b>	<b>54</b>	<b>372</b>	<b>46</b>	<b>317</b>

Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services.

Note: "Total cancer deaths" include all reportable cancer deaths except deaths from nonmelanoma skin cancer (see Tech. Notes on page 48)

(Table continued on next page)

**Table C. Number of Cancer Deaths by Site Group and County of Residence, Wisconsin, 1997 (Continued)**

Primary Site	Rusk	St. Croix	Sauk	Sawyer	Shawano	Sheboygan	Taylor	Trempealeau	Vernon	Vilas	Walworth
Mouth and Pharynx	0	0	0	1	0	3	1	2	1	2	4
Stomach	1	0	2	0	1	3	2	2	1	1	3
Colon	3	9	15	7	8	34	3	7	8	3	20
Rectum & Rectosigmoid Junction	0	0	2	2	2	7	0	1	2	1	1
Pancreas	2	5	2	2	7	15	3	6	2	8	17
Other Gastrointestinal Tract	3	6	7	5	3	14	1	5	5	2	10
Trachea, Bronchus & Lung	9	22	21	15	17	69	5	11	10	15	50
Other Respiratory	2	1	1	1	0	1	0	0	0	1	1
Bone & Connective Tissue	1	1	0	2	1	5	1	1	0	1	3
Melanoma of Skin	0	0	0	1	0	2	0	1	0	2	3
Breast	3	6	9	2	7	20	3	5	3	4	12
Cervix Uteri	0	0	3	1	2	3	0	1	0	0	0
Corpus Uteri	1	0	0	0	2	1	0	0	0	2	0
Other Female Genital	3	4	5	2	2	7	0	3	3	1	5
Prostate	4	4	8	1	6	22	3	3	5	6	10
Other Male Genital	0	0	0	0	0	1	1	0	0	0	0
Urinary Bladder	1	2	1	1	2	7	2	3	2	0	4
Kidney & Other Urinary	0	2	1	2	2	9	1	1	1	3	4
Eye, Brain & Other Nervous System	1	2	3	1	0	5	3	1	0	3	9
Lymph Nodes	2	4	3	1	5	20	3	3	4	2	7
Leukemia	2	2	3	1	5	14	7	1	3	2	7
All Others	3	12	5	1	8	16	3	6	12	6	15
Total Cancer Deaths	41	82	91	49	80	278	42	63	62	65	185

Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services.

Note: "Total cancer deaths" include all reportable cancer deaths except deaths from nonmelanoma skin cancer (see Tech. Notes on page 48)

(Table continued on next page)

**Table C. Number of Cancer Deaths by Site Group and County of Residence, Wisconsin, 1997**

Primary Site	Washburn	Washington	Waukesha	Waupaca	Waushara	Winnebago	Wood
Mouth and Pharynx	0	3	6	2	1	5	1
Stomach	1	4	18	3	0	4	5
Colon	9	15	51	13	5	29	21
Rectum & Rectosigmoid Junction	1	4	5	2	2	3	3
Pancreas	1	5	26	14	1	12	6
Other Gastrointestinal Tract	3	14	29	9	2	20	12
Trachea, Bronchus & Lung	12	41	162	33	18	89	31
Other Respiratory	0	0	6	4	0	7	1
Bone & Connective Tissue	1	1	8	0	1	2	2
Melanoma of Skin	1	0	9	0	1	2	2
Breast	4	17	48	10	5	18	14
Cervix Uteri	0	0	3	3	1	1	1
Corpus Uteri	0	0	4	0	0	1	1
Other Female Genital	1	8	20	5	0	14	5
Prostate	4	15	39	7	5	17	14
Other Male Genital	0	0	1	0	0	0	0
Urinary Bladder	1	4	14	8	0	6	4
Kidney & Other Urinary	0	6	13	5	0	7	6
Eye, Brain & Other Nervous System	2	7	31	3	0	12	4
Lymph Nodes	1	14	35	7	4	13	7
Leukemia	2	8	27	8	3	17	12
All Others	3	12	62	13	3	34	16
Total Cancer Deaths	47	178	617	149	52	313	168

Source: 1997 Wisconsin resident death file, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services.

Note: "Total cancer deaths" include all reportable cancer deaths except deaths from nonmelanoma skin cancer (see Tech. Notes on page 48.)

**Table D. Wisconsin and National Age-Adjusted Invasive Incidence and Mortality Rates, All Sites and Selected Sites, Wisconsin, 1996 and 1997**

Primary Site		Age-Adjusted Rates					
		Both Sexes		Male		Female	
		National (1996)	Wisconsin (1997)	National (1996)	Wisconsin (1997)	National (1996)	Wisconsin (1997)
All Sites	Incidence	388.6	385.3	454.6	452.7	342.0	336.8
	Mortality	166.9	156.8	207.1	190.7	139.0	133.0
Lung	Incidence	54.2	53.1	70.0	70.6	42.3	39.6
	Mortality	48.8	42.0	68.2	55.8	34.3	31.6
Colorectal	Incidence	42.7	48.0	51.1	55.5	36.2	42.0
	Mortality	16.8	16.3	20.5	19.7	14.0	13.7
Female Breast	Incidence	---	---	---	---	110.7	110.1
	Mortality	---	---	---	---	24.3	21.0
Prostate	Incidence	---	---	135.7	141.3	---	---
	Mortality	---	---	24.1	22.5	---	---

Source: Wisconsin data are from the Wisconsin Cancer Reporting System, Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services. National data are from the SEER publication, *SEER Cancer Statistics Review, 1973-1996*, National Cancer Institute, Bethesda, MD, 1999.

Note: Rates are per 100,000 population.

- The Surveillance, Epidemiology and End Results (SEER) program, a project of the National Cancer Institute, contains information on cancers diagnosed between 1973 and 1996. The SEER program includes population-based registries in eleven areas including the states of Connecticut, Hawaii, Iowa, New Mexico, Utah and the metropolitan areas of Atlanta, GA, Detroit, MI, Los Angeles, San Francisco and San Jose, CA and Seattle-Puget Sound, WA.
- In every instance listed above, the Wisconsin age-adjusted mortality rate is lower than the SEER rate. Wisconsin age-adjusted incidence rates are also lower than their SEER counterparts, except for colorectal cancer in both sexes and prostate cancer.

